

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: September 29, 2005, 10:55:38 ; Search time 65.5 Seconds
(without alignments)
1287.233 Million cell updates/sec

Title: US-10-695-195-2
Perfect score: 1155
Sequence: 1 MSFVGENSGVKGMSDEWEDK.....IEFSFQVCKAEMSPSEVSD 218

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_16Dec04.*
1: Geneseqp1980s.*
2: Geneseqp1990s.*
3: Geneseqp2000s.*
4: Geneseqp2001s.*
5: Geneseqp2002s.*
6: Geneseqp2003as.*
7: Geneseqp2003bs.*
8: Geneseqp2004s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	1155	100.0	218	3 AAY91884	Aay91884 Primate i
2	1155	100.0	218	8 ADU88304	Adj88304 Human int
3	1155	100.0	218	8 ADL15866	Adl15866 Human int
4	1155	100.0	218	8 ADO04677	Ado04677 Human int
5	1130	97.8	218	3 AAY70927	Aay70927 Human zil
6	1130	97.8	218	3 AAY96940	Aay96940 Human IL-
7	1130	97.8	218	3 AAB28266	Aab28266 Human int
8	1130	97.8	218	4 AAB85136	Aab85136 Interleuk
9	1130	97.8	218	8 ADN05012	Adn05012 Antipsori
10	1127	97.6	218	3 AAY71084	Aay71084 Human zil
11	1127	97.6	218	7 ADH89067	Adh89067 Human zil
12	1126	97.5	218	3 AAY70933	Aay70933 Human zil
13	1126	97.5	218	7 ADH89075	Adh89075 Human int
14	1121	97.1	218	3 AAY95299	Aay95299 Human int
15	1116	96.6	218	3 AAY91885	Aay91885 Primate i
16	1116	96.6	218	4 AAB47186	Aab47186 IL-1 rela
17	1116	96.6	218	4 AAG68116	Aag68116 Human int
18	1116	96.6	218	8 ADJ88306	Adj88306 Human int
19	1116	96.6	218	8 ADL15868	Adl15868 Human int
20	1116	96.6	218	8 ADN41836	Adn41836 Amino aci
21	1116	96.6	218	8 ADO04679	Ado04679 Human int
22	1114	96.5	218	3 AAY70931	Aay70931 Human zil
23	1114	96.5	218	7 ADH89072	Adh89072 Human int
24	1061	91.9	207	3 AAY96938	Aay96938 Human IL-
25	1022	88.5	198	4 AAB85138	Aab85138 Interleuk

ALIGNMENTS

RESULT 1

RAY91884
ID AAY91884 standard; protein; 218 AA.
XX
AC AAY91884;
XX
XX 19-JUL-2000 (first entry)
XX
XX Primate interleukin-1 like (IL-1-zeta).
XX
XX Primate; interleukin-1 like; IL-1-zeta; systemic inflammation; fever;
KW hypoglycemia; plasma iron; plasma zinc; acute liver response;
KW plasma copper.
XX
OS Mammalia.

Key	Location/Qualifiers
Domain	58..64
Domain	/label= beta_strand_1
Domain	69..74
Domain	/label= beta_strand_2
Domain	76..80
Domain	/label= beta_strand_3
Domain	91..96
Domain	/label= beta_strand_4
Binding-site	100..106
	/note= "forms a loop which is part of a primary binding segment to the IL-1 receptor type"
Domain	107..113
Domain	/label= beta_strand_5
Domain	118..126
Domain	/label= beta_strand_6
Domain	131..136
Domain	/label= beta_strand_7
Domain	154..161
Domain	/label= beta_strand_8
Domain	163..169
Domain	/label= beta_strand_9
Domain	176..180
Domain	/label= beta_strand_10
Domain	185..204
Domain	/label= beta_strand_11
Domain	201..204
Domain	/label= beta_strand_12

WO200017363-A2.

30-MAR-2000.

```

XX 17-SEP-1999; 99WO-US020868.
XX
XX 18-SEP-1998; 98US-00156966.
XX
XX (SCHE ) SCHERING CORP.
XX
XX Timans JC;
XX
XX WPI; 2000-283588/24.
XX N-PSDB; AAA08512.
XX
XX New mammalian interleukin 1 like molecule, designated IL-1-zeta, useful
XX for diagnostic and therapeutic purposes, comprises a 128 amino acid
XX sequence.
XX
XX Claim 1; Page 102; 110pp; English.
XX
XX The present sequence is a primate interleukin-1 like molecule, designated
XX IL-1-zeta. An alternative sequence, encoded by an allelic variant is
XX given in AA91885. The 12 beta strands, indicated in the features table,
XX fold into a beta-trefoil fold. The specification claims an isolated or
XX recombinant polypeptide that: (a) specifically binds polyclonal
XX antibodies generated against at least a 12 consecutive amino acid segment
XX of IL-1-zeta (see AA91884) or its allelic variant (see AA91885); and
XX (b) comprises at least one sequence selected from: AA91886-903 or
XX AA91904-06. The preferred 12 consecutive amino acid segment is chosen
XX from AA91907-18 or AA91919-21. IL-1-zeta is likely to play a role in
XX systemic inflammatory reactions, such as fever, hypoglycemia, reduced
XX plasma iron and zinc, the acute response of the liver, and increase
XX plasma copper. IL-1-zeta binding compounds (comprising antigen binding
XX sites) and IL-1-zeta polypeptides are also useful for both diagnostic and
XX therapeutic purposes
XX
XX Sequence 218 AA;
XX
Query Match 100.0%; Score 1155; DB 3; Length 218;
Best Local Similarity 100.0%; Pred. No. 9.3e-121;
Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MSFVGENSGVKGSEDEWKEDEPOCCLEDPAGSLPEPGPSLPTNFWHTSRKVKSLMPKPF 60
Db 1 MSFVGENSGVKGSEDEWKEDEPOCCLEDPAGSLPEPGPSLPTNFWHTSRKVKSLMPKPF 60
Qy 61 SIHQDHKVLVLDGSLNLIAPVDKNYIRPEIFFALASSLSASAEGKSLILLGVSKGEFCL 120
Db 61 SIHQDHKVLVLDGSLNLIAPVDKNYIRPEIFFALASSLSASAEGKSLILLGVSKGEFCL 120
Qy 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGSRNLMLESAAHPGWFICTS 180
Db 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGSRNLMLESAAHPGWFICTS 180
Qy 181 CNCNEPVGVTDKFENRKHIEFFSQPVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFFSQPVCKAEMSPSEVSD 218

RESULT 2
ID ADJ88304
XX ADJ88304 standard; protein; 218 AA.
XX
XX ADJ88304;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human interleukin-1zeta protein.
XX
XX Interleukin-1zeta; gene therapy; immune system; haematopoietic cell;
XX inflammatory disorder; infection; allergy; cancer; human.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers

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FT Region
FT /note= "Epitope"
FT 5. .11
FT Region
FT /note= "Epitope"
FT 9. .20
FT Region
FT /note= "Epitope"
FT 15. .20
FT Region
FT /note= "Epitope"
FT 24. .30
FT Region
FT /note= "Epitope"
FT 30. .41
FT Region
FT /note= "Epitope"
FT 45. .50
FT Region
FT /note= "Epitope"
FT 49. .60
FT Region
FT /note= "Epitope"
FT 58. .64
FT Domain
FT /note = Beta strand domain
FT 58. .64
FT Region
FT /note= "Epitope"
FT 63. .74
FT Region
FT /note= "Epitope"
FT 69. .74
FT Domain
FT /note = Beta strand domain
FT 69. .74
FT Region
FT /note= "Epitope"
FT 76. .87
FT Region
FT /note= "Epitope"
FT 76. .81
FT Region
FT /note= "Epitope"
FT 76. .80
FT Domain
FT /note = Beta strand domain
FT 91. .96
FT Domain
FT /note = Beta strand domain
FT 91. .96
FT Region
FT /note= "Epitope"
FT 92. .103
FT Region
FT /note= "Epitope"
FT 99. .105
FT Region
FT /note= "Epitope"
FT 107. .113
FT Domain
FT /note = Beta strand domain
FT 107. .113
FT Region
FT /note= "Epitope"
FT 118. .126
FT Domain
FT /note = Beta strand domain
FT 118. .124
FT Region
FT /note= "Epitope"
FT 127. .138
FT Region
FT /note= "Epitope"
FT 131. .136
FT Domain
FT /note = Beta strand domain
FT 131. .136
FT Region
FT /note= "Epitope"
FT 139. .146
FT Region
FT /note= "Epitope"
FT 141. .152
FT Region
FT /note= "Epitope"
FT 154. .161
FT Domain
FT /note = Beta strand domain
FT 154. .160
FT Region
FT /note= "Epitope"
FT 156. .167
FT Region
FT /note= "Epitope"
FT 163. .169
FT Domain
FT /note = Beta strand domain
FT 163. .169
FT Region
FT /note= "Epitope"
FT 175. .180
FT Region
FT /note= "Epitope"
FT 176. .180
FT Domain
FT /note = Beta strand domain
FT 179. .190
FT Region
FT /note= "Epitope"
FT 185. .204
FT Domain

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```

FT Region /note = Beta strand domain
FT 185..190
FT /note= "Epitope"
FT 193..204
FT /note= "Epitope"
FT 201..207
FT /note= "Epitope"
FT 205..216
FT /note= "Epitope"
XX
XX US6680380-B1.
XX
XX 20-JAN-2004.
XX
XX 17-SEP-1999; 99US-00398412.
XX
XX 18-SEP-1998; 98US-0100948P.
XX
XX (SCHE ) SCHERING CORP.
XX
XX Timans JC;
XX
XX WPI; 2004-189656/18.
XX N-PSDB; ADJ88303.
XX
XX New nucleic acid molecules encoding mammalian interleukin-1 polypeptides,
XX useful for diagnosing, preventing or treating diseases associated with
XX abnormal expression of interleukin, e.g. inflammation, infection or
XX cancer.
XX
XX Claim 2; SEQ ID NO 2; 36pp; English.
XX
XX The invention relates to an isolated or recombinant nucleic acid encoding
XX interleukin-1zeta polypeptide. The invention is useful in gene therapy.
XX The composition and methods are useful in diagnosing or treating
XX degenerative or abnormal conditions which directly or indirectly involve
XX development, differentiation or function, e.g. of the immune system
XX and/or haematopoietic cells. The invention may also be used for
XX preventing or treating other diseases or disorders associated with
XX abnormal expression or triggering of response to the interleukin, such as
XX inflammatory disorders, infection, allergies or cancer. The present
XX sequence is human interleukin-1zeta.
XX
XX Sequence 218 AA;
XX
XX Query Match 100.0%; Score 1155; DB 8; Length 218;
XX Best Local Similarity 100.0%; Pred. No. 9.3e-121;
XX Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 MSFVGENSGVKGSGEDWEKDEPQCLEDPPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
XX DB 1 MSFVGENSGVKGSGEDWEKDEPQCLEDPPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
XX
XX QY 61 SIHQDQHKVLVLDGSLNIAPDKNYIRPEIFALASSLSASAEGKSILLGVSGEGFCL 120
XX DB 61 SIHQDQHKVLVLDGSLNIAPDKNYIRPEIFALASSLSASAEGKSILLGVSGEGFCL 120
XX
XX QY 121 YCDKDKGQSHPSLQKKEKLMKLAQKESARRPFIYFRAQVGSRRNMLESAHPGWFICT 180
XX DB 121 YCDKDKGQSHPSLQKKEKLMKLAQKESARRPFIYFRAQVGSRRNMLESAHPGWFICT 180
XX
XX QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
XX DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
XX
XX RESULT 3
XX ADL15866
XX ID ADL15866 standard; protein; 218 AA.
XX AC ADL15866;
XX
XX 01-JUL-2004 (first entry)

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XX DE Human interleukin 1 zeta (IL-1zeta) seqid 2.
XX
XX antiinflammatory; interleukin 1 zeta; IL-1 zeta; immunogen;
XX antisera production; antibody production; anti-inflammatory; human.
XX
XX Homo sapiens.
XX
XX US2004068099-A1.
XX
XX 08-APR-2004.
XX
XX 27-OCT-2003; 2003US-00695195.
XX
XX 18-SEP-1998; 98US-0100948P.
XX 17-SEP-1999; 99US-00398412.
XX
XX (TIMA/) TIMANS J C.
XX
XX Timans JC;
XX
XX WPI; 2004-304623/28.
XX N-PSDB; ADL15865.
XX
XX Novel isolated or recombinant interleukin 1 zeta polypeptide useful as
XX immunogen for producing specific antibodies or for developing anti-
XX inflammatory therapeutics.
XX
XX Claim 1; SEQ ID NO 2; 42pp; English.
XX
XX The invention describes an isolated or recombinant interleukin 1 zeta
XX polypeptide (I) that specifically binds to polyclonal antibodies
XX generated against at least a 12 consecutive amino acid segment of two
XX fully defined sequences (S1) and (S2) having 218 amino acids as given in
XX the specification and comprises at least one sequence chosen from (S1)
XX and (S2). Also described are: a fusion protein comprising (I) or its
XX sequences, a detection or purification tag, including FLAG, His6 or Ig
XX sequence or sequence of another cytokine or chemokine; a binding compound
XX (II) an antigen binding site from an antibody, which specifically binds
XX to (I); a composition of matter comprising a sterile polypeptide (I) or
XX (II), (I) or (II) and a carrier such as an aqueous compound e.g., water,
XX saline and/or buffer, where the carrier is formulated for oral, rectal,
XX nasal, topical or parental administration; an isolated or recombinant
XX nucleic acid (III) that encodes (I) or several antigenic peptides of (S1)
XX or (S2); a cell (IV) transformed with (III); a method of modulating a
XX cell involved in an inflammatory response, by contacting the cell with an
XX agonist or antagonist of (I); a kit comprising a compartment of (I), (II)
XX or (III) and/or instructions for use or disposal of reagents in the kit;
XX and producing an antibody as mentioned in (II) or an antigen:antibody
XX complex. (I) is useful as immunogen for producing antisera or specific
XX antibodies or useful for developing more effective anti-inflammatory
XX therapeutics. This is the amino acid sequence of a human interleukin 1
XX zeta polypeptide.
XX
XX Sequence 218 AA;
XX
XX Query Match 100.0%; Score 1155; DB 8; Length 218;
XX Best Local Similarity 100.0%; Pred. No. 9.3e-121;
XX Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 MSFVGENSGVKGSGEDWEKDEPQCLEDPPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
XX DB 1 MSFVGENSGVKGSGEDWEKDEPQCLEDPPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
XX
XX QY 61 SIHQDQHKVLVLDGSLNIAPDKNYIRPEIFALASSLSASAEGKSILLGVSGEGFCL 120
XX DB 61 SIHQDQHKVLVLDGSLNIAPDKNYIRPEIFALASSLSASAEGKSILLGVSGEGFCL 120
XX
XX QY 121 YCDKDKGQSHPSLQKKEKLMKLAQKESARRPFIYFRAQVGSRRNMLESAHPGWFICT 180
XX DB 121 YCDKDKGQSHPSLQKKEKLMKLAQKESARRPFIYFRAQVGSRRNMLESAHPGWFICT 180
XX
XX QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218

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Db      181  |CNCNEPVGVTDFENRKHIEFSPQVCKAEMSPSEVSD 218|
          |||||||
RESULT 4
ADO04677
ID      ADO04677 standard; protein; 218 AA.
XX      AC      ADO04677;
XX      XX      29-JUL-2004 (first entry)
XX      XX      Human interleukin-1 zeta.
XX      XX      Interleukin-1 zeta; inflammatory reaction; immune system; IL-1 zeta;
KW      KW      immunological disorder; human.
OS      OS      Homo sapiens.
XX      XX      Key      Location/Qualifiers
FH      Binding-site      53..56
FT      FT      /note= "IL-1 receptor binding site B "
FT      Domain      58..64
FT      FT      /note = Beta1 strand
FT      Binding-site      58
FT      FT      /note= "IL-1 receptor binding site B"
FT      Binding-site      63..66
FT      FT      /note= "IL-1 receptor binding site A "
FT      Domain      69..74
FT      FT      /note = Beta2 strand
FT      Binding-site      72..74
FT      FT      /note= "IL-1 receptor binding site A "
FT      Domain      76..80
FT      FT      /note = Beta3 strand
FT      Binding-site      78
FT      FT      /note= "IL-1 receptor binding site A "
FT      Binding-site      80..87
FT      FT      /note= "IL-1 receptor binding site A "
FT      Domain      91..96
FT      FT      /note = Beta4 strand
FT      Binding-site      95..103
FT      FT      /note= "IL-1 receptor binding site B "
FT      Domain      107..113
FT      FT      /note = Beta5 strand
FT      Domain      118..126
FT      FT      /note = Beta6 strand
FT      Binding-site      127..153
FT      FT      /note= "IL-1 receptor binding site C "
FT      Domain      131..136
FT      FT      /note = Beta7 strand
FT      Domain      154..161
FT      FT      /note = Beta8 strand
FT      Binding-site      159
FT      FT      /note= "IL-1 receptor binding site B "
FT      Binding-site      161..164
FT      FT      /note= "IL-1 receptor binding site B "
FT      Domain      163..169
FT      FT      /note = Beta9 strand
FT      Domain      176..180
FT      FT      /note = Beta10 strand
FT      Binding-site      181..186
FT      FT      /note= "IL-1 receptor binding site A "
FT      Domain      185..204
FT      FT      /note = Beta11 strand
FT      Domain      201..204
FT      FT      /note = Beta12 strand
FT      Binding-site      202..204
FT      FT      /note= "IL-1 receptor binding site A "
FT      Binding-site      205
FT      FT      /note= "IL-1 receptor binding site B "
FT      Binding-site      207
FT      FT      /note= "IL-1 receptor binding site B "
```

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PN      US2004087766-A1.
XX      06-MAY-2004.
XX      27-OCT-2003; 2003US-00694978.
XX      18-SEP-1998; 98US-0100948P.
PR      17-SEP-1999; 99US-00398412.
XX      (TIMA/) TIMANS J C.
XX      Timans JC;
XX      PI
XX      WPI; 2004-374758/35.
DR      N-PSDB; ADO04676, ADO04691.
XX      New isolated or recombinant interleukin-1 zeta polypeptide and related
PT      reagents such as antibodies, useful for treating inflammatory disease and
PT      as probes for diagnosing immunological disorders.
XX      Claim 1; SEQ ID NO 2; 42pp; English.
XX      The invention relates to interleukin-1 zeta polypeptide and
CC      polynucleotide. The agonist or antagonist of the interleukin-1 zeta is
CC      useful in modulating a cell that is involved in inflammatory response.
CC      The peptide fragments of IL-1 zeta are useful in research and diagnostic
CC      tools in the study of inflammatory reactions to antigenic challenge and
CC      the development of more effective anti-inflammatory therapeutics.
CC      Interleukin-1 zeta is useful in regulation and/or development of immune
CC      system. A polynucleotide encoding IL-1 zeta is useful for detecting the
CC      expression level of the polypeptide in a patient suspected of having an
CC      immunological disorder. The present sequence is human interleukin-1 zeta
CC      protein.
XX      SQ      Sequence 218 AA;
Query Match      100.0%; Score 1155; DB 8; Length 218;
Best Local Similarity      100.0%; Fred. No. 9.3e-121; Indels 0; Gaps 0;
Matches 218; Conservative 0; Mismatches 0;
QY      1      MSFVGENSGVKGSEDEWKEDEPOCCLEDPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
          |||||||
DB      1      MSFVGENSGVKGSEDEWKEDEPOCCLEDPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
          |||||||
QY      61      SIHQDHKVLVLDGSLIAVPDKNYIRPEIFPALLASLSASAEKGSLLILGVSKGEFCL 120
          |||||||
DB      61      SIHQDHKVLVLDGSLIAVPDKNYIRPEIFPALLASLSASAEKGSLLILGVSKGEFCL 120
          |||||||
QY      121      YCDKDKGQSHPSLQKKEKLMKLAOKESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180
          |||||||
DB      121      YCDKDKGQSHPSLQKKEKLMKLAOKESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180
          |||||||
QY      181      CNCNEPVGVTDFENRKHIEFSPQVCKAEMSPSEVSD 218
          |||||||
DB      181      CNCNEPVGVTDFENRKHIEFSPQVCKAEMSPSEVSD 218
          |||||||
RESULT 5
AAAY70927
ID      AAAY70927 standard; protein; 218 AA.
XX      AC      AAAY70927;
XX      DT      05-SEP-2000 (first entry)
XX      DE      Human zilla4 protein.
XX      KW      Human interleukin-1; IL-1; zilla4 protein; inflammation; arthritis;
KW      KW      psoriasis; septic shock; graft-versus-host disease; leukaemia; cancer;
KW      KW      anaemia; inflammatory bowel disease; acute neuropathology; shock;
KW      KW      chronic neuropathology; respiratory disease syndrome; restenosis;
KW      KW      acquired immune deficiency syndrome; AIDS; anti-inflammatory; cytostatic;
KW      KW      anti-arthritis; anti-psoriatic; antibacterial; immunosuppressive;
```


KW	anti-anaemic; neuroprotective; vasotropic;
KX	anti-human immunodeficiency virus; HIV.
XX	Homo sapiens.
OS	
XX	
FH	Key
FT	Domain
FT	/label= Beta_strand
FT	60..64
FT	Domain
FT	/label= Beta_strand
FT	65..67
FT	/note= "Variable loop region involved in receptor binding"
FT	68..72
FT	Domain
FT	/label= Beta_strand
FT	73..76
FT	/note= "Variable loop region involved in receptor binding"
FT	77..79
FT	Domain
FT	/label= Beta_strand
FT	80..89
FT	/note= "Variable loop region involved in receptor binding"
FT	90..96
FT	Domain
FT	/label= Beta_strand
FT	97..107
FT	/note= "Variable loop region involved in receptor binding"
FT	108..113
FT	Domain
FT	/label= Beta_strand
FT	114..117
FT	/note= "Variable loop region involved in receptor binding"
FT	118..123
FT	Domain
FT	/label= Beta_strand
FT	124..131
FT	/note= "Variable loop region involved in receptor binding"
FT	132..138
FT	Domain
FT	/label= Beta_strand
FT	139..153
FT	/note= "Variable loop region involved in receptor binding"
FT	154..160
FT	Domain
FT	/label= Beta_strand
FT	161..164
FT	/note= "Variable loop region involved in receptor binding"
FT	165..169
FT	Domain
FT	/label= Beta_strand
FT	170..174
FT	/note= "Variable loop region involved in receptor binding"
FT	175..179
FT	Domain
FT	/label= Beta_strand
FT	180..186
FT	/note= "Variable loop region involved in receptor binding"
FT	187..189
FT	Domain
FT	/label= Beta_strand
FT	190..200
FT	/note= "Variable loop region involved in receptor binding"
FT	201..204
FT	Domain
FT	/label= Beta_strand
XX	
FN	WO200024899-A2.
XX	
PD	04-MAY-2000.
XX	
PF	27-OCT-1999; 99WO-US025038.
XX	
PR	27-OCT-1998; 98US-00179614.
XX	
PA	(ZYMO) ZYMOGENETICS INC.

XX	West RR,	Sheppard PO,	Gao Z;
PI	WPI;	2000-350740/30.	
DR	N-PSDB;	AAD00210.	
DR	Immunomodulatory interleukin-1 homolog zilla4 proteins, useful for		
PT	treatment of e.g. arthritis, psoriasis, septic shock, graft-versus-host		
PT	disease, leukemia.		
PT			
XX	.Claim 4; Fig 2; 88pp; English.		
XX	The present sequence is the human interleukin (IL)-1 homolog zilla4		
CC	protein. This protein contains a core structure of 12 beta-strands wound		
CC	into a beta-barrel, with the beta-strands separated from each other by		
CC	loops. The loops between these beta-strands are highly variable among the		
CC	family members and are believed to be involved in receptor binding. The		
CC	zillia4 proteins modulate inflammation and other immunological processes		
CC	and are therefore useful for treatment of arthritis, psoriasis, septic		
CC	shock, graft-versus-host disease and leukaemia. Other diseases that may		
CC	be modulated by zillia4 proteins include cancer, anaemia, inflammatory		
CC	bowel disease, acute and chronic neuropathologies, shock, respiratory		
CC	disease syndrome, restenosis and acquired immune deficiency syndrome		
XX			
SQ	Sequence 218 AA;		
	Query Match	97.8%; Score 1130; DB 3; Length 218;	
	Best Local Similarity	98.2%; Pred. No. 6e-118;	
	Matches 214; Conservative	1; Mismatches 3; Indels 0; Gaps 0;	
Qy	1 MSFVGENSGVKMGSEDEKDEPOCCELDPAAGSPLEPGPSPLTWNFVHTSRKVSLNPKKF	60	
Db	1 MSFVGENSGVKMGSEDEKDEPOCCELDPAAGSPLEPGPSPLTWNFVHTSRKVSLNPKKF	60	
Qy	61 SIHQDHKVLVDGNGNLIAVPDKNYIRPEIFFALASSLSASAFAKGLSLLGVSKGEFCL	120	
Db	61 SIHQDHKVLVDGNGNLIAVPDKNYIRPEIFFALASSLSASAFAKGLSLLGVSKGEFCL	120	
Qy	121 YCDKDKGSHPSLQLKKEKLMLKLAQAQESARRPFIFYRAQVGSRNMLESAAHPGWFICT	180	
Db	121 YCDKDKGSHPSLQLKKEKLMLKLAQAQESARRPFIFYRAQVGSRNMLESAAHPGWFICT	180	
Qy	181 CNCNEPVGVTDKFNKRKHIEFSQPVCKAEMSPSEVS	218	
Db	181 CNCNEPVGVTDKFNKRKHIEFSQPVCKAEMSPSEVS	218	
RESULT 6			
AAAY96940	ID	AAAY96940 standard; protein; 218 AA.	
XX	AC	AAAY96940;	
XX	DT	31-OCT-2000 (first entry)	
XX	DE	Human IL-1 receptor antagonist 1 V.	
XX	KW	hIL-1RaLV, human interleukin-1 receptor antagonist-1; IL-1lp;	
KW	osteopathic; interleukin-1-like polypeptide; anti-inflammatory;		
KW	anti-asthmatic; anti-arthritis; antimicrobial; respiratory; vaccine;		
KW	anti-ischemic; dermatological; immunomodulatory; gastrointestinal;		
KW	gene therapy.		
XX			
OS	Homo sapiens.		
XX			
FN	WO2000039297-A2.		
XX			
PD	06-JUL-2000.		
XX			
FF	22-DEC-1999; 99WO-US030720.		
XX			
PR	23-DEC-1998; 98US-0113430P.		
PR	22-JAN-1999; 99US-0116843P.		

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PR 13-APR-1999; 99US-0129122P.
XX (GETH ) GENENTECH INC.
XX Goddard A, Pan J;
XX WPI; 2000-452395/39.
DR N-PSDB; AAA51604.
XX Nucleic acids encoding interleukin-1-like polypeptides, useful for
PT preventing and treating e.g. inflammation, asthma and psoriasis.
XX Claim 22; Fig 19; 143pp; English.
XX An isolated nucleic acid molecule encoding an interleukin-1-like
CC polypeptide (IL-1lp) that retains one or more activities of the peptide
CC from which it is derived, such as the IL-18R binding activity of a human
CC interleukin-1 receptor antagonist-1 (hIL-1ra1) polypeptide, is new. The
CC nucleic acids may be used in molecular engineering applications, e.g.
CC hybridization assays and chromosome and gene mapping studies, for
CC recombinantly producing the IL-1lp polypeptide or for producing gene
CC knock out animals to study the role of the protein in metabolism and
CC disease processes (conversely, gene therapy protocols may be used to
CC supplement a patients production of the polypeptide or to rectify
CC mutations that lead to the production of in active peptides). The
CC peptides produced may be used to screen for and produce modulators (e.g.
CC antibodies) of IL-1lp protein expression and activity which may be use to
CC treat disorders associated with inappropriate IL-1lp expression and
CC activity, such as inflammatory disorders, asthma, arthritis,
CC osteoarthritis, sepsis, acute lung injury, adult respiratory distress
CC syndrome, idiopathic pulmonary fibrosis, ischemic reperfusion disease,
CC psoriasis, graft versus host disease and/or inflammatory bowel disease.
XX
XX SQ Sequence 218 AA;
~ Query Match 97.8%; Score 1130; DB 3; Length 218;
Best Local Similarity 98.2%; Pred. No. 6e-118;
Matches 214; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
Q/ 1 MSFVGNSGVKMGSEDEWDEPQCCLDPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
Db 1 MSFVGNSGVKMGSEDEWDEPQCCLDPAGSPLEPGPSLPTMNFVHTSPKVKNLNPKKF 60
Q/ 61 SIHQDHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSILLGVSKGEFCL 120
Db 61 SIHQDHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSILLGVSKGEFCL 120
Q/ 121 YCDKDKGQSHPSIQLKKEKLMKLAOKESARRPFIYRAQVGSNNMLESAAHPGWFICTS 180
Db 121 YCDKDKGQSHPSIQLKKEKLMKLAOKESARRPFIYRAQVGSNNMLESAAHPGWFICTS 180
Q/ 181 CNCNEPVGVTDFENRKHIEFSFPVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDFENRKHIEFSFPVCKAEMSPSEVSD 218
RESULT 7
AAB28266
ID AAB28266 standard; protein; 218 AA.
XX AAB28266;
AC AAB28266;
XX
XX 13-FEB-2001 (first entry)
XX Human interleukin-1 homologue IL-1H4.
XX Human; interleukin-1 homologue; IL-1H4; inflammation; septicaemia;
KW autoimmune disease; inflammatory bowel disease; psoriasis; arthritis;
KW transplant rejection; graft versus host disease; infection; stroke;
KW ischaemia; acute respiratory disease; allergy; asthma; restenosis;
KW brain injury; AIDS; bone disease; osteoporosis; cancer;
KW congestive heart failure; atherosclerosis; Alzheimer's disease.
XX
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OS Homo sapiens.
XX WO200063226-A1.
XX 26-OCT-2000.
XX 14-APR-2000; 2000WO-US010207.
XX 16-APR-1999; 99US-00293625.
XX (SMIK ) SMITHKLINE BEECHAM CORP.
XX Young PR, McDonnell PC;
XX WPI; 2000-687155/67.
DR N-PSDB; AAC66727.
XX Interleukin-1 homolog useful for treating conditions such as chronic and
PT acute inflammation, septicemia, autoimmune diseases ischemia, acute
PT respiratory disease, allergies, and asthma.
XX Claim 1; Page 28-29; 30pp; English.
XX The present sequence is human interleukin-1 homologue (IL-1H4). IL-1H4 is
CC useful for treating conditions such as chronic and acute inflammation,
CC septicaemia, autoimmune diseases (e.g. inflammatory bowel disease,
CC psoriasis, and arthritis), transplant rejection, graft versus host
CC disease, infection, stroke, ischaemia, acute respiratory disease,
CC allergies, asthma, restenosis, brain injury, AIDS, bone diseases (e.g.
CC osteoporosis), cancer, congestive heart failure, atherosclerosis, and
CC Alzheimer's disease, related to either an excess of, or an under-
CC expression of, IL-1H4 polypeptide activity
XX
XX SQ Sequence 218 AA;
Query Match 97.8%; Score 1130; DB 3; Length 218;
Best Local Similarity 98.2%; Pred. No. 6e-118;
Matches 214; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
Q/ 1 MSFVGNSGVKMGSEDEWDEPQCCLDPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
Db 1 MSFVGNSGVKMGSEDEWDEPQCCLDPAGSPLEPGPSLPTMNFVHTSPKVKNLNPKKF 60
Q/ 61 SIHQDHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSILLGVSKGEFCL 120
Db 61 SIHQDHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSILLGVSKGEFCL 120
Q/ 121 YCDKDKGQSHPSIQLKKEKLMKLAOKESARRPFIYRAQVGSNNMLESAAHPGWFICTS 180
Db 121 YCDKDKGQSHPSIQLKKEKLMKLAOKESARRPFIYRAQVGSNNMLESAAHPGWFICTS 180
Q/ 181 CNCNEPVGVTDFENRKHIEFSFPVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDFENRKHIEFSFPVCKAEMSPSEVSD 218
RESULT 8
AAB85136
ID AAB85136 standard; protein; 218 AA.
XX AAB85136;
AC AAB85136;
XX
XX 22-AUG-2001 (first entry)
XX Interleukin-1 homologue (IL-1H4) polypeptide.
XX Interleukin-1; IL-1H4; antiinflammatory; antibacterial; antiallergic;
KW immunosuppressive; antipsoriatic; antiarthritic; cytostatic; antiHIV;
KW cerebroprotective; antiasthmatic; vasotropic; vulnary; osteopathic;
KW immunostimulant; antiarteriosclerotic; nootropic; neuroprotective;
KW gene therapy; vaccine.
XX
XX OS Homo sapiens.
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XX PH Key Location/Qualifiers
XX FT Peptide 1..20
XX FT /note= "signal peptide"
XX FT Cleavage-site 20..21
XX FT Protein 21..218
XX FT /note= "specifically claimed mature protein (AAB85138)"
XX PN WO200140247-A1.
XX XX
XX PD 07-JUN-2001.
XX XX
XX PF 30-NOV-2000; 2000WO-US032521.
XX XX
XX PR 01-DEC-1999; 99US-00452140.
XX XX
XX PA (SMIK ) SMITHKLINE BEECHAM CORP.
XX XX
XX PI Kumar S, McDonnell PC, Young PR;
XX XX
XX DR WPI; 2001-389949/41.
XX DR N-PSDB; AAF84120.
XX XX
XX PT Novel Interleukin-1 homolog, IL-1H4, for treating chronic and acute
XX PT inflammation, septicemia, autoimmune diseases, transplant rejection,
XX PT graft versus host disease, stroke, ischemia, allergy and asthma.
XX XX
XX PS Example; Page 29; 30pp; English.
XX XX
XX CC The invention provides an isolated interleukin-1 homologue, IL-1H4
XX CC polypeptide. The IL-1H4 polypeptide can be expressed by standard
XX CC recombinant methodology. The IL-1H4 polypeptide, polynucleotides and
XX CC modulators are useful for treating chronic and acute inflammation,
XX CC septicemia, autoimmune diseases (e.g., inflammatory bowel disease,
XX CC psoriasis and arthritis), transplant rejection, graft versus host
XX CC disease, infection, stroke, ischemia, acute respiratory disease syndrome,
XX CC allergies, asthma, restenosis, brain injury, AIDS, bone diseases (e.g.,
XX CC osteoporosis), cancer (e.g., lymphoproliferative disorders), congestive
XX CC heart failure, atherosclerosis and Alzheimer's disease. The IL-1H4
XX CC polynucleotides are useful as diagnostic reagents and for chromosome
XX CC identification. The present sequence represents the IL-1H4 polypeptide
XX XX
XX SQ Sequence 218 AA;
XX XX
XX Query Match 97.8%; Score 1130; DB 4; Length 218;
XX Best Local Similarity 98.2%; Pred. No. 6e-118;
XX Matches 214; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX XX
QY 1 MSFVGENSGVKGSEDWEKDEPQCLEDPPAGSPLEPGSLPTMNFVHTSRKVKSLNPKKF 60
DB 1 MSFVGENSGVKGSEDWEKDEPQCLEDPPAGSPLEPGSLPTMNFVHTSRKVKSLNPKKF 60
XX XX
QY 61 SIHDQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILGVSKGEFCL 120
DB 61 SIHDQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120
XX XX
QY 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSRNMLESAHPGWFICTS 180
DB 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSRNMLESAHPGWFICTS 180
XX XX
QY 181 CNCNEPVGVTDFKFNKRKHIEFSPQVCKAEMSPSEVSD 218
DB 181 CNCNEPVGVTDFKFNKRKHIEFSPQVCKAEMSPSEVSD 218
XX XX
RESULT 9
ADN05012
ID ADN05012 standard; protein; 218 AA.
XX XX
AC ADN05012;
XX XX
DT 01-JUL-2004 (first entry)
XX XX
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DE Antipsoriatic protein sequence #686.
XX antipsoriatic; gene therapy; psoriasis; diagnosis.
XX Homo sapiens.
XX WO2004028479-A2.
XX 08-APR-2004.
XX 25-SEP-2003; 2003WO-US030907.
XX 25-SEP-2002; 2002US-0414006P.
XX (GETH ) GENENTECH INC.
XX Bodary S, Clark H, Jackman J, Schoenfeld J, Williams PM, Wood WI;
XX Wu TD;
XX WPI; 2004-305105/28.
XX N-PSDB; ADN05011.
XX New PRO nucleic acid or polypeptide, useful for preparing a
XX pharmaceutical composition for diagnosing or treating psoriasis in a
XX mammal.
XX Claim 9; SEQ ID NO 1406; 3069pp; English.
XX The invention relates to novel polynucleotide and polypeptides for
XX treating psoriasis or a sequence having at least 80% identity to the
XX above sequences. The nucleic acid is useful for preparing a composition
XX for diagnosing or treating psoriasis in a mammal. This sequence
XX corresponds to one of the polypeptides of the invention.
XX SQ Sequence 218 AA;
XX XX
XX Query Match 97.8%; Score 1130; DB 8; Length 218;
XX Best Local Similarity 98.2%; Pred. No. 6e-118;
XX Matches 214; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX XX
QY 1 MSFVGENSGVKGSEDWEKDEPQCLEDPPAGSPLEPGSLPTMNFVHTSRKVKSLNPKKF 60
DB 1 MSFVGENSGVKGSEDWEKDEPQCLEDPPAGSPLEPGSLPTMNFVHTSRKVKSLNPKKF 60
XX XX
QY 61 SIHDQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILGVSKGEFCL 120
DB 61 SIHDQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120
XX XX
QY 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSRNMLESAHPGWFICTS 180
DB 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSRNMLESAHPGWFICTS 180
XX XX
QY 181 CNCNEPVGVTDFKFNKRKHIEFSPQVCKAEMSPSEVSD 218
DB 181 CNCNEPVGVTDFKFNKRKHIEFSPQVCKAEMSPSEVSD 218
XX XX
RESULT 10
AAY71084
ID AAY71084 standard; protein; 218 AA.
XX XX
AC AAY71084;
XX XX
DT 05-SEP-2000 (first entry)
XX XX
DE Human zilla4-E200D variant protein.
XX Human interleukin-1; IL-1; zilla4 protein; inflammation; arthritis;
XX psoriasis; septic shock; graft-versus-host disease; leukaemia; cancer;
XX anaemia; inflammatory bowel disease; acute neuropathology; shock;
XX chronic neuropathology; respiratory disease syndrome; restenosis;
XX acquired immune deficiency syndrome; AIDS; antiinflammatory; cytostatic;
XX anti-arthritis; anti-psoriatic; antibacterial; immunosuppressive;
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KW anti-anaemic; neuroprotective; vasotropic; variant;
 KW anti-human immunodeficiency virus; HIV.
 OS Homo sapiens.
 XX WO200024899-A2.
 PN 04-MAY-2000.
 XX 27-OCT-1999; 99WO-US025038.
 XX 27-OCT-1998; 98US-00179614.
 PR (ZYMO) ZYMOGENETICS INC.
 XX West RR, Sheppard PO, Gao Z;
 PI WPI; 2000-350740/30.
 XX Immunomodulatory interleukin-1 homolog zilla4 proteins, useful for
 PT treatment of e.g. arthritis, psoriasis, septic shock, graft-versus-host
 PT disease, leukemia.
 XX Claim 3; Page; 88pp; English.
 PS The present sequence is a variant of human interleukin (IL)-1 homolog
 CC zilla4 protein, consisting of Asp in place of Glu at position 200. The
 CC replacement of Glu (200) with Asp results in attenuation of pro-
 CC inflammatory activity of zilla4 protein. The zilla4 proteins modulate
 CC inflammation and other immunological processes and are therefore useful
 CC for treatment of arthritis, psoriasis, septic shock, graft-versus-host
 CC disease and leukaemia. Other diseases that may be modulated by zilla4
 CC proteins include cancer, anaemia, inflammatory bowel disease, acute and
 CC chronic neuropathologies, shock, respiratory disease syndrome, restenosis
 CC and acquired immune deficiency syndrome. Note: The present sequence is
 CC not shown in the specification but is derived from human zilla4 protein
 CC sequence shown in figure-2 (AAY70927)
 XX SQ Sequence 218 AA;

* Query Match 97.6%; Score 1127; DB 3; Length 218;
 Best Local Similarity 97.7%; Pred. No. 1.3e-117;
 Matches 213; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAQSPLEPGPSLPTNMFVHTSRKVKSLNPKKF 60
 DB 1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAQSPLEPGPSLPTNMFVHTSRKVKSLNPKKF 60
 QY 61 SIHQDQHKVLVLDGSLNLIAPVDKNYIRPEIFFALASSLSASAEKGSLLILGVSKGEFCL 120
 DB 61 SIHQDQHKVLVLDGSLNLIAPVDKNYIRPEIFFALASSLSASAEKGSPIILGVSKGEFCL 120
 QY 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGRNMLESAAHPGWFICT 180
 DB 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGRNMLESAAHPGWFICT 180
 QY 181 CNCNEPVGVTDFKFNKHIIEFSFQPVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDFKFNKHIIEFSFQPVCKAEMSPSEVSD 218

RESULT 11
 ADH89067
 ID ADH89067 standard; protein; 218 AA.
 XX AC ADH89067;
 XX 22-APR-2004 (first entry)
 DT Human zilla4 polypeptide.
 DE Human zilla4 polypeptide.
 XX Human; interleukin-1 homologue; IL-1; zilla4; immune response;
 KW inflammatory disease; cancer; anaemia; immunomodulator; antiinflammatory;
 KW

KW cytostatic; antianaemic.
 XX Homo sapiens.
 XX US2003148467-A1.
 PN 07-AUG-2003.
 XX 22-NOV-2002; 2002US-00302554.
 XX 27-OCT-1998; 98US-0105824P.
 PR 27-OCT-1999; 99US-00428118.
 XX (ZYMO) ZYMOGENETICS INC.
 XX West RR, Sheppard PO, Gao Z;
 PI WPI; 2003-897576/82.
 XX N-PSDB; ADH89066.
 XX New interleukin-1 homolog Zilla4 protein, useful for modulating an immune
 PT response and for treating diseases, e.g., inflammatory diseases, cancer
 PT or anemia.
 XX Claim 8; SEQ ID NO 2; 44pp; English.
 PS The present invention relates to the isolation of human interleukin-1 (IL
 CC -1) homologues designated zilla4, and the polynucleotide sequences that
 CC encode them. The gene encoding human zilla4 is located on chromosome 2.
 CC Also disclosed is a method of making these proteins and a method of
 CC modulating an immune response. The proteins are useful for treating
 CC diseases such as inflammatory diseases, cancer, and anaemia. The present
 CC sequence represents human zilla4.
 XX SQ Sequence 218 AA;

Query Match 97.6%; Score 1127; DB 7; Length 218;
 Best Local Similarity 97.7%; Pred. No. 1.3e-117;
 Matches 213; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAQSPLEPGPSLPTNMFVHTSRKVKSLNPKKF 60
 DB 1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAQSPLEPGPSLPTNMFVHTSRKVKSLNPKKF 60
 QY 61 SIHQDQHKVLVLDGSLNLIAPVDKNYIRPEIFFALASSLSASAEKGSLLILGVSKGEFCL 120
 DB 61 SIHQDQHKVLVLDGSLNLIAPVDKNYIRPEIFFALASSLSASAEKGSPIILGVSKGEFCL 120
 QY 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGRNMLESAAHPGWFICT 180
 DB 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGRNMLESAAHPGWFICT 180
 QY 181 CNCNEPVGVTDFKFNKHIIEFSFQPVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDFKFNKHIIEFSFQPVCKAEMSPSEVSD 218

RESULT 12
 AAY70933
 ID AAY70933 standard; protein; 218 AA.
 XX AC AAY70933;
 XX 05-SEP-2000 (first entry)
 DT Human zilla4-E200K variant protein.
 XX Human interleukin-1; IL-1; zilla4 protein; inflammation; arthritis;
 KW psoriasis; septic shock; graft-versus-host disease; leukaemia; cancer;
 KW anaemia; inflammatory bowel disease; acute neuropathology; shock;
 KW chronic neuropathology; respiratory disease syndrome; restenosis;
 KW acquired immune deficiency syndrome; AIDS; antiinflammatory; cytostatic;
 KW anti-arthritis; anti-psoriasis; antibacterial; immunosuppressive;
 KW

KW anti-anaemic; neuroprotective; vasotropic;
 KW anti-human immunodeficiency virus; HIV.
 OS Homo sapiens.
 XX WO200024899-A2.
 XX 04-MAY-2000.
 XX 27-OCT-1999; 99WO-US025038.
 XX 27-OCT-1998; 98US-00179614.
 XX (ZYMO) ZYMOGENETICS INC.
 XX West RR, Sheppard PO, Gao Z;
 XX WPI; 2000-350740/30.
 XX N-PSDB; AAD00212.
 XX Immunomodulatory interleukin-1 homolog zilla4 proteins, useful for
 PT treatment of e.g. arthritis, psoriasis, septic shock, graft-versus-host
 PT disease, leukemia.
 XX Claim 8; Page 77-78; 88pp; English.
 XX The present sequence is a variant of human interleukin (IL)-1 homolog
 CC zilla4 protein designated zilla4-E200K. The replacement of Glu (200) with
 CC Lys results in change in activity from agonist to antagonist. The zilla4
 CC proteins modulate inflammation and other immunological processes and are
 CC therefore useful for treatment of arthritis, psoriasis, septic shock,
 CC graft-versus-host disease and leukaemia. Other diseases that may be
 CC modulated by zilla4 proteins include cancer, anaemia, inflammatory bowel
 CC disease, acute and chronic neuropathologies, shock, respiratory disease
 CC syndrome, restenosis and acquired immune deficiency syndrome
 XX Sequence 218 AA;
 SQ

Query Match 97.5%; Score 1126; DB 3; Length 218;
 Best Local Similarity 97.7%; Pred. NO. 1.7e-117;
 Matches 213; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKMGSEDEKDEPQCLEDPAAGSPLEPGPSLPTMNFVHTSRKVSINPKKF 60
 DB 1 MSFVGENSGVKMGSEDEKDEPQCLEDPAAGSPLEPGPSLPTMNFVHTSRKVSINPKKF 60
 QY 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILIGVSKGEFCL 120
 DB 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLIGVSKGEFCL 120
 QY 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFRAQVGSNNMLESAAHPGWFICTS 180
 DB 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFRAQVGSNNMLESAAHPGWFICTS 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218

RESULT 13
 ADH89075
 ID ADH89075 standard; protein; 218 AA.
 XX ADH89075;
 XX 22-APR-2004 (first entry)
 XX Human zilla4 variant protein #5.
 XX Human; interleukin-1 homologue; IL-1; zilla4; immune response;
 KW inflammatory disease; cancer; anaemia; immunomodulator; antiinflammatory;
 KW cyrostatic; antianaemic.

OS Homo sapiens.
 OS Synthetic.
 XX Key Location/Qualifiers
 FT Misc-difference 200 /note= "Encoded by AAR"
 XX US2003148467-A1.
 XX 07-AUG-2003.
 XX 22-NOV-2002; 2002US-00302554.
 XX 27-OCT-1998; 98US-0105824P.
 XX 27-OCT-1999; 99US-00428118.
 XX (ZYMO) ZYMOGENETICS INC.
 XX West RR, Sheppard PO, Gao Z;
 XX WPI; 2003-897576/82.
 XX N-PSDB; ADH89074.
 XX New interleukin-1 homolog zilla4 protein, useful for modulating an immune
 PT response and for treating diseases, e.g., inflammatory diseases, cancer
 PT or anemia.
 XX Claim 8; SEQ ID NO 14; 44pp; English.
 XX The present invention relates to the isolation of human interleukin-1 (IL
 CC -1) homologues designated zilla4, and the polynucleotide sequences that
 CC encode them. The gene encoding human zilla4 is located on chromosome 2.
 CC Also disclosed is a method of making these proteins and a method of
 CC modulating an immune response. The proteins are useful for treating
 CC diseases such as inflammatory diseases, cancer, and anaemia. The present
 CC sequence represents a variant human zilla4 protein.
 XX Sequence 218 AA;
 SQ

Query Match 97.5%; Score 1126; DB 7; Length 218;
 Best Local Similarity 97.7%; Pred. NO. 1.7e-117;
 Matches 213; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKMGSEDEKDEPQCLEDPAAGSPLEPGPSLPTMNFVHTSRKVSINPKKF 60
 DB 1 MSFVGENSGVKMGSEDEKDEPQCLEDPAAGSPLEPGPSLPTMNFVHTSRKVSINPKKF 60
 QY 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILIGVSKGEFCL 120
 DB 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLIGVSKGEFCL 120
 QY 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFRAQVGSNNMLESAAHPGWFICTS 180
 DB 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFRAQVGSNNMLESAAHPGWFICTS 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218

RESULT 14
 AAY95299
 ID AAY95299 standard; protein; 218 AA.
 XX AAY95299;
 XX 12-SEP-2000 (first entry)
 XX Human interleukin-1 zeta splice variant TDZ.1.
 XX Interleukin-1 zeta; IL-1 zeta; splice variant; human; TDZ.1;
 KW testis-derived zeta variant; therapy; inflammation; fever.
 XX

OS Homo sapiens.
XX WO200036108-A2.
PN 22-JUN-2000.
XX 14-DEC-1999; 99WO-US029549.
XX 14-DEC-1998; 98US-0112163P.
PR 10-NOV-1999; 99US-0164675P.
XX (IMMV) IMMUNEX CORP.
PA
XX Sims JE, Smith DE, Born TL;
PI WPI; 2000-442387/38.
XX N-PSDB; AAA27920.
DR
XX Isolated interleukin-1 (IL-1) zeta nucleic acids and splice variants
PT TDZ1, TDZ2, TDZ3 and their encoding proteins, useful as probes for
PT identifying genes associated with diseases such as glaucoma, and insulin-
PT dependent diabetes mellitus.
XX
PS Claim 10; Page 11; 87pp; English.
XX
CC The present sequence is that of splice variant TDZ.1 (testis-derived zeta
CC variant) of human interleukin-1 zeta (IL-1 zeta). TDZ.1 mRNA is generated
CC from exons 1, 2, 4, 5 and 6 of the IL-1 zeta locus, and the encoded
CC protein is probably a functional IL-1 like molecule. TDZ.1 mRNA is
CC expressed most strongly in the kidney, skeletal muscle, testis, prostate,
CC ovary, colon, small intestine, liver, placenta, lung, tonsil, foetal
CC liver, lymph node and bone marrow. The invention is directed to novel,
CC purified and isolated IL-1 zeta, its splice variants and Xrec2
CC polypeptides (see AAY95297-301), the nucleic acids (see AAA27918-22)
CC encoding such polypeptides, processes for production of recombinant forms
CC of such polypeptides, and their uses. The polypeptides can be used to
CC study cellular processes such as immune regulation, cell proliferation,
CC cell death, cell migration, cell-to-cell interaction and inflammatory
CC responses, to identify proteins associated with IL-1 zeta, to screen for
CC potential inhibitors, and to prepare antibodies. In particular, they can
CC be used to activate and/or inhibit the activation of vascular endothelial
CC cells and lymphocytes, induce and/or inhibit the induction of local
CC tissue destruction and fever, inhibit and/or stimulate macrophages and
CC vascular endothelial cells to produce IL-6, induce and/or inhibit the
CC induction of prostaglandins, nitric oxide synthetase, and
CC metalloproteases, and upregulate and/or inhibit the upregulation of
CC molecules on the surface of vascular endothelial cells
XX
SQ Sequence 218 AA;
Query Match 97.1%; Score 1121; DB 3; Length 218;
Best Local Similarity 97.7%; Pred. No. 6.1e-117;
Matches 213; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
Qy 1 MSFVGENSGVKGMSDEWKEDEPQCCLEDPAAGSPLEPGPSLPTNFVHTSRKXSLNPKKF 60
Db 1 MSFVGENSGVKGMSDEWKEDEPQCCLEDPAAGSPLEPGPSLPTNFVHTSRKXSLNPKKF 60
Qy 61 SIHQDHKVLAVDSGNLIAPVDKNYIRPEIFFALASSLSASAEKSLILLGVSKGEFCL 120
Db 61 SIHQDHKVLAVDSGNLIAPVDKNYIRPEIFFALASSLSASAEKSGPSILLGVSKGEFCL 120
Qy 121 YCDKDGQSHPSLQKKEKLMKLAQKESARRPFIFYRAQVGSNNMLESAAHFGWFICT 180
Db 121 YCDKDGQSHPSLQKKEKLMKLAQKESARRPFIFYRAQVGSNNMLESAAHFGWFICT 180
Qy 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
RESULT 15
AAY91885

ID AAY91885 standard; protein; 218 AA.
XX
AC AAY91885;
XX
DT 19-JUL-2000 (first entry)
XX
DE Primate interleukin-1 like molecule (IL-1-zeta) alternative sequence.
XX
KW Primate; interleukin-1 like; IL-1-zeta; systemic inflammation; fever;
KW hypoglycemia; plasma iron; plasma zinc; acute liver response;
KW plasma copper.
XX
OS Mammalia.
XX
FH Key Location/Qualifiers
XX Domain 58..64 /label= beta_strand_1
FT 69..74 /label= beta_strand_2
FT 76..80 /label= beta_strand_3
FT 91..96 /label= beta_strand_4
FT 100..106 /label= beta_strand_5
FT Binding-site /note= "forms a loop which is part of a primary binding
FT segment to the IL-1 receptor type"
FT Domain 107..113 /label= beta_strand_6
FT Domain 118..126 /label= beta_strand_7
FT Domain 131..136 /label= beta_strand_8
FT Domain 154..161 /label= beta_strand_9
FT Domain 163..169 /label= beta_strand_10
FT Domain 176..180 /label= beta_strand_11
FT Domain 185..204 /label= beta_strand_12
FT Domain 201..204 /label= beta_strand_12
XX
PN WO200017363-A2.
XX
PD 30-MAR-2000.
XX
PF 17-SEP-1999; 99WO-US020868.
XX
PR 18-SEP-1998; 98US-00156966.
XX (SCHE) SCHERING CORP.
XX Timans JC;
PI
DR WPI; 2000-283588/24.
DR N-PSDB; AAA08513.
XX
PT New mammalian interleukin 1 like molecule, designated IL-1-zeta, useful
PT for diagnostic and therapeutic purposes, comprises a 128 amino acid
PT sequence.
XX
PS Claim 1; Page 103-104; 110pp; English.
XX
CC The present sequence is an alternative primate interleukin-1 like
CC molecule, designated IL-1-zeta. The 12 beta strands, indicated in the
CC features table, fold into a beta-trefoil fold. The specification claims
CC an isolated or recombinant polypeptide that: (a) specifically binds
CC polyclonal antibodies generated against at least a 12 consecutive amino
CC acid segment of IL-1-zeta (see AAY91884) or its allelic variant (see
CC AAY91885); and (b) comprises at least one sequence selected from:
CC AAY91886-903 or AAY91904-06. The preferred 12 consecutive amino acid
CC segment is chosen from AAY91907-18 or AAY91919-21. IL-1-zeta is likely to

CC play a role in systemic inflammatory reactions, such as fever,
CC hypoglycemia, reduced plasma iron and zinc, the acute response of the
CC liver, and increase plasma copper. IL-1-zeta binding compounds
CC (comprising antigen binding sites) and IL-1-zeta polypeptides are also
CC useful for both diagnostic and therapeutic purposes
XX
SQ Sequence 218 AA;

Query Match		96.6%;	Score 1116;	DB 3;	Length 218;
Best Local Similarity		97.2%;	Pred. No. 2.2e-116;		
Matches 212;		Conservative 1;	Mismatches 5;	Indels 0;	Gaps 0;
Qy	1	MSFVGNSGVKMGSEDEKDEPQCCELEDPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF	60		
Db	1	MSFVGNSGVKMGSEDEKDEPQCCELEDPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF	60		
Qy	61	SIHDQDHKVLVLDSCNLIAPDKNYIRPEIFFALASSLSASAEKGSLLILGVSKGEFCL	120		
Db	61	SIHDQDHKVLVLDSCNLIAPDKNYIRPEIFFALASSLSASAEKGSLLILGVSKGEFCL	120		
Qy	121	YCDKDKGSHPSLQKKKMLAAQKESARRPFIFYRAQVGSRNMLESAAHPCGFICTS	180		
Db	121	YCDKDKGSHPSLQKKKMLAAQKESARRPFIFYRAQVGSRNMLESAAHPCGFICTS	180		
Qy	181	CNCNEPVGVTDKFENRKHIIEFSQPVCKAEMSPSEVSD	218		
Db	181	CNCNEPVGVTDKFENRKHIIEFSQPVCKAEMSPSEVSD	218		

Search completed: September 29, 2005, 11:12:56
Job time : 58.5 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model
Run on: September 29, 2005, 11:04:58 ; Search time 25.5 Seconds
(without alignments)
822.559 Million cell updates/sec

Title: US-10-695-195-2
Perfect score: 1155
Sequence: 1 MSFVGENSGVKMGSEDEKD.....IEFSFQPVCKAEMSPSEVSD 218

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues
Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 79:*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	163.5	14.2	155	2 JC7104	interleukin-1 rece
2	160	13.9	178	2 A44610	interleukin-1 rece
3	155.5	13.5	177	2 A30368	interleukin-1 rece
4	155.5	13.5	180	2 A39386	interleukin-1 rece
5	151.5	13.1	177	2 A54377	interleukin-1 rece
6	147.5	12.8	178	2 C40956	interleukin-1 rece
7	121	10.5	267	2 S38373	interleukin-1 beta
8	118.5	10.3	266	1 S23010	interleukin-1 beta
9	115	10.0	267	1 JN0724	interleukin-1 beta
10	103.5	9.0	266	1 ICB018	interleukin-1 beta
11	100.5	8.7	269	1 I55969	interleukin-1 beta
12	94.5	8.2	269	1 IGHU1B	interleukin-1 beta
13	86	7.4	214	2 JC5646	interleukin-1 beta
14	86	7.4	268	1 A30584	interleukin-1 beta
15	85	7.4	425	2 T24522	interleukin-1 beta
16	85	7.4	1001	2 E71806	transcription-repa
17	84.5	7.3	845	2 T17291	hypothetical prote
18	84	7.3	859	2 C87358	hypothetical prote
19	83	7.0	772	2 D96504	protein F9C16.25 [
20	81	7.0	270	1 ICM51	interleukin-1 alph
21	80	6.9	236	1 B72299	L-fucose-phospha
22	80	6.9	776	2 S67053	probable membrane
23	79	6.8	351	2 T19372	hypothetical prote
24	78.5	6.8	215	2 I45857	beta-crystallin -
25	78.5	6.8	2584	2 T24158	hypothetical prote
26	78.5	6.8	2606	2 T24157	hypothetical prote
27	78	6.8	571	2 D86164	hypothetical prote
28	78	6.8	673	2 C86278	F14117.15 protein
29	78	6.8	851	2 D82254	hypothetical prote

30	77.5	6.7	547	2 T45635	hypothetical prote
31	77.5	6.7	862	2 T34342	hypothetical prote
32	77.5	6.7	1561	2 S46200	acetyl-CoA carboxy
33	77	6.7	712	1 IJMSCT	T-cadherin precurs
34	77	6.7	717	2 I51206	T-cadherin 2 - chi
35	77	6.7	999	2 E64712	transcription-repa
36	77	6.7	1405	2 T04426	hypothetical prote
37	76.5	6.6	611	2 E72114	oligodeopeptidase
38	76.5	6.6	611	2 H86507	oligopeptidase [im
39	76	6.6	404	2 S34031	KTR3 protein - yea
40	76	6.6	737	2 T46101	ABC transporter-li
41	76	6.6	747	2 I39444	AMP deaminase [EC
42	76	6.6	1118	2 A48292	mucin, tracheobron
43	75.5	6.5	211	2 T48794	hypothetical prote
44	75.5	6.5	627	2 T02846	dynein light chain
45	75.5	6.5	914	2 B96592	hypothetical prote

ALIGNMENTS

RESULT 1

JC7104
interleukin-1 receptor antagonist - human
C/Species: Homo sapiens (man)
C/Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004
C/Accession: JC7104
R/Mulero, J.J.; Pace, A.M.; Nelken, S.T.; Loeb, D.B.; Correa, T.R.; Drmanac, R.; Ford, Biochem. Biophys. Res. Commun. 263, 702-706, 1999
A/Title: IL1H1: A novel interleukin-1 receptor antagonist gene.
A/Reference number: JC7104; MUID:99443727; PMID:10512743
A/Accession: JC7104
A/Molecule type: mRNA
A/Residues: 1-155 <MUL>
A/Cross-references: UNIPROT:Q9UBH0; GB:AF186094; NID:96049804; PIDN:AAF02757.1; PID:960
C/Genetics:
A/Gene: il1h1
A/Map position: 2q14
C/Keywords: macrophage

Query Match 14.2%; Score 163.5; DB 2; Length 155;
Best Local Similarity 32.9%; Pred. No. 8.2e-08;
Matches 50; Conservative 17; Mismatches 48; Indels 37; Gaps 6;

Qy	60	FSIHQDQHKVLVDLDSGNLIAVPDKNYRPIFFALASSLSASAEEK	-----106
Db	9	FRMKDSALKVLYLHNNQ	-----LAGGLHAGKVIKGEISVWPNRWLDA 52
Qy	107	--SLILGVSKGEFLCYCDKDKGQSPSLQKKKMKL-AAQKESARRPFIYRAQVGS	163
Db	53	SLSPVILGVQGSQCLSC--GVGQ-EPTLTLEPNIMELYLGAKES--KSFTFYRRDMGL	107
Qy	164	RNMLESAAHPGWFICTSCNCPNPVGVTDKFPEN	195
Db	108	TSSPESAAYPGWLCTVPEADQPVRLQLPEN	139

RESULT 2

A44610
interleukin-1 receptor antagonist precursor - mouse
N/Alternate names: IL-1RA
C/Species: Mus musculus (house mouse)
C/Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
C/Accession: A44610; B40956; A49031; I56106; I52970
R/Matsushima, H.; Roussel, M.F.; Matsushima, K.; Hishinuma, A.; Sherr, C.J. Blood 78, 616-623, 1991
A/Title: Cloning and expression of murine interleukin-1 receptor antagonist in macroph
A/Reference number: A44610; MUID:91316273; PMID:1830498
A/Accession: A44610
A/Molecule type: mRNA
A/Residues: 1-178 <MAT>
A/Cross-references: UNIPROT:P25085; GB:M64404; NID:9198296; PIDN:AAA39277.1; PID:91982
R/Eisenberg, S.P.; Brewer, M.T.; Verderber, E.; Heimdal, P.; Brandhuber, B.J.; Thompson,

Proc. Natl. Acad. Sci. U.S.A. 88, 5232-5236, 1991
A;Title: Interleukin 1 receptor antagonist is a member of the interleukin 1 gene family:
A;Reference number: A40956; MUID:91271363; PMID:1828896
A;Accession: B40956
A;Molecule type: DNA
A;Residues: 7-178 <EIS>
A;Cross-references: GB:M63100; NID:g198389; PIDN:AAA39310.1; PID:g198390
R;Shuck, M.E.; Eessalu, T.E.; Tracey, D.E.; Bienkowski, M.J.
Eur. J. Immunol. 21, 2775-2780, 1991
A;Title: Cloning, heterologous expression and characterization of murine interleukin 1
A;Reference number: A49031; MUID:92037824; PMID:1834470
A;Accession: A49031
A;Molecule type: mRNA
A;Residues: 23-178 <RES>
A;Cross-references: GB:S64082; NID:g238584; PIDN:AAB20265.1; PID:g238585
A;Experimental source: peritoneal macrophages, ICR strain
A;Note: sequence extracted from NCBI backbone (NCBIN:64082, NCBIP:64085)
R;Zahedi, K.; Seidlin, M.F.; Rits, M.; Ezekowitz, R.B.; Whitehead, A.S.
J. Immunol. 146, 4228-4233, 1991
A;Title: Mouse IL-1 receptor antagonist protein: Molecular characterization, gene mapping
A;Reference number: I56106; MUID:91250712; PMID:1828262
A;Accession: I56106
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-178 <RES>
A;Cross-references: GB:M74294; NID:g198387; PIDN:AAA39309.1; PID:g198388
R;Zahedi, K.A.; Uhlar, C.M.; Rits, M.; Prada, A.E.; Whitehead, A.S.
Cytokine 6, 1-9, 1994
A;Title: The mouse interleukin 1 receptor antagonist protein: gene structure and regulation
A;Reference number: I52970; MUID:94271931; PMID:8003626
A;Accession: I52970
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-178 <RE2>
A;Cross-references: GB:I32838; NID:g487864; PIDN:AAA20576.1; PID:g528978
C;Genetics:
A;Gene: IL-1rn
A;Introns: 40/2; 70/1; 107/3
C;Superfamily: interleukin-1
C;Keywords: cytokine receptor
F;1-26/Domain: signal sequence #status predicted <SIG>
F;21-178/Product: interleukin-1 receptor antagonist #status predicted <MA2>
Query Match 13.9%; Score 160; DB 2; Length 178;
Best Local Similarity 32.7%; Pred. No. 2.1e-07;
Matches 48; Conservative 23; Mismatches 64; Indels 12; Gaps 7;
Qy 60 PSIHQDQKVLVLDGNIIVDPKKNYIR-PEIFFALASSLSASAEGKSLILIGVSKGEF 118
Db 39 FRIWDTNQKTFYLRNNQLIA----GYLQGFNI--KLEEKIDMVPIDILHS-VFLGIHGKGL 91
Qy 119 CLYCDKQGSHPSLQKKEKLMKLAQKESARRPFIFYRAQVGSRNMLESAHPGWFIC 178
Db 92 CLSCAKSGDDI--KLQLEEVNITDLSKNKEDKR-FTFIRSEKGPPTSFSACPGWFLC 148
Qy 179 TSCNCFPVGVGTDRFENRKH-IEFSFQ 204
Db 149 TLEADRPVSLTNPPEPLIVTKYFQ 175
RESULT 3
A30368
Interleukin-1 receptor antagonist secreted form precursor - human
C;Species: Homo sapiens (man)
C;Date: 07-Jun-1990 #sequence revision 07-Jun-1990 #text change 09-Jul-2004
C;Accession: A40956; I37894; A30368; S08160; S08159; A37822
R;Eisenberg, S.P.; Brewer, M.T.; Verderber, E.; Heimdal, P.; Brandhuber, B.J.; Thompson,
Proc. Natl. Acad. Sci. U.S.A. 88, 5232-5236, 1991
A;Title: Interleukin 1 receptor antagonist is a member of the interleukin 1 gene family:
A;Reference number: A40956; MUID:91271363; PMID:1828896
A;Accession: A40956
A;Molecule type: DNA
A;Residues: 1-177 <EIS>

A;Cross-references: UNIPROT:P18510; GB:M63099; NID:gi86385; PIDN:AAB41943.1; PID:g186381
R;Jennard, A.; Gorman, P.; Carrier, M.; Griffiths, S.; Scotney, H.; Sheer, D.; Solari, J.
Cytokine 4, 83-89, 1992
A;Title: Cloning and chromosome mapping of the human interleukin-1 receptor antagonist
A;Reference number: I37894; MUID:92338323; PMID:1385987
A;Accession: I37894
A;Status: translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-177 <LEN>
A;Cross-references: EMBL:X64532; NID:g33798; PIDN:CAA5832.1; PID:g33799
R;Cartier, D.B.; Delbel Jr., M.R.; Dunn, C.J.; Tomich, C.S.C.; Laborde, A.L.; Slighcom,
J.G.; Sieu, L.C.; Hardee, M.M.; Zurcher-Neely, H.A.; Reardon, I.M.; Heinrikson, R.L.; T.
Nature 344, 633-638, 1990
A;Title: Purification, cloning, expression and biological characterization of an interl
A;Reference number: A30368; MUID:90220867; PMID:2139180
A;Accession: A30368
A;Molecule type: mRNA
A;Residues: 1-177 <CAR>
A;Cross-references: GB:X53296; NID:g32578; PIDN:CAA37386.1; PID:g32579
A;Note: parts of this sequence, including the amino end of the mature protein, were con
R;Eisenberg, S.P.; Evans, R.J.; Arend, W.P.; Verderber, E.; Brewer, M.T.; Hannum, C.H.;
Nature 343, 341-346, 1990
A;Title: Primary structure and functional expression from complementary DNA of a human
A;Reference number: S08160; MUID:90136921; PMID:2137201
A;Accession: S08160
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-177 <BI2>
A;Cross-references: GB:X52015; NID:g32576; PIDN:CAA36262.1; PID:g32577
R;Hannum, C.H.; Wilcox, C.J.; Arend, W.P.; Joslin, F.G.; Dripps, D.J.; Heimdal, P.L.; A
Nature 343, 336-340, 1990
A;Title: Interleukin-1 receptor antagonist activity of a human interleukin-1 inhibitor.
A;Reference number: S08159; MUID:90136920; PMID:2137200
A;Accession: S08159
A;Molecule type: protein
A;Residues: 26-75; 97-108; 110-116; 120-131; 163-176 <HAN>
R;Bienkowski, M.J.; Eessalu, T.E.; Berger, A.E.; Truesdell, S.E.; Shelly, J.A.; Laborde
J. Biol. Chem. 265, 14505-14511, 1990
A;Title: Purification and characterization of interleukin 1 receptor level antagonist p
A;Reference number: A37822; MUID:90354444; PMID:2143761
A;Accession: A37822
A;Molecule type: protein
A;Residues: 26-52; 70-77; 122-127; 170-175 <BIE>
A;Experimental source: culture medium, PMA-stimulated THP-1 cells
C;Comment: For an alternative splice form, see PIR:A39386
C;Genetics:
A;Gene: GDB:IL1RN
A;Cross-references: GDB:125897; OMIM:147679
A;Map position: 2q14.2-2q14.2
A;Introns: 39/2; 69/1; 106/3
C;Superfamily: interleukin-1
C;Keywords: alternative splicing; cytokine receptor; extracellular protein; glycoprotein
F;1-25/Domain: signal sequence #status predicted <SIG>
F;26-177/Product: interleukin-1 receptor antagonist #status experimental <MA2>
F;109/Binding site: carbohydrate (Asn) (covalent) #status experimental
Query Match 13.5%; Score 155.5; DB 2; Length 177;
Best Local Similarity 30.7%; Pred. No. 5.3e-07;
Matches 43; Conservative 26; Mismatches 60; Indels 11; Gaps 6;
Qy 53 KSLNPKFSIHQDQKVLVLDGNIIVDPKKNYIR-PEIFFALASSLSASAEGKSLILL 111
Db 31 KSSKMQAFRIWDTNQKTFYLRNNQLVA---GYLQGFNV--NLEEKIDVVPPIPHAL-FL 83
Qy 112 GVSKGFCFLYCDKDKGQSHPSLQKKEKLMKLAQKESARRPFIFYRAQVGSRNMLESA 171
Db 84 GIGGKKKCLSCVSKSGDETR--LQLEAVNITDLSKNKQDKR-PAFIRSDSGPTTSFESAA 140
Qy 172 HPGWFICTSCNCFPVGVTD 191
Db 141 CPGWFLCTAMEADQPVSLTN 160

RESULT 4

A39386

N;Contains: interleukin-1 receptor antagonist, long intracellular splice form - human

C;Species: Homo sapiens (man)

C;Date: 28-Feb-1992 #sequence_revision 11-Apr-1997 #text_change 09-Jul-2004

C;Accession: I37893; A39386

R;Muzio, M.; Polentarutti, N.; Sironi, M.; Poli, G.; De Gioia, L.; Introna, M.; Mantovan J. Exp. Med. 182, 623-628, 1995

A;Title: Cloning and characterization of a new isoform of the interleukin 1 receptor antagonist. Cloning and characterization of a new isoform of the interleukin 1 receptor antagonist

A;Reference number: I37893; MUID:95355865; PMID:7629520

A;Accession: I37893

A;Status: translated from GB/EMBL/DBJ

A;Molecule type: mRNA

A;Residues: 1-180 <RES>

A;Cross-references: UNIPROT:P18510; EMBL:X84349; NID:G1008970; PIDN:CAAS9087.1; PID:G1008970

R;Haskill, S.; Martin, G.; Van Le, L.; Morris, J.; Peace, A.; Bigler, C.F.; Jaffe, G.J.; Proc. Natl. Acad. Sci. U.S.A. 88, 3681-3685, 1991

A;Title: cDNA cloning of an intracellular form of the human interleukin 1 receptor antagonist

A;Reference number: A39386; MUID:91219436; PMID:1827201

A;Accession: A39386

A;Molecule type: mRNA

A;Residues: 1-3,25-180 <HAS>

A;Cross-references: GB:M55646; NID:G186291; PIDN:AAAS9138.1; PID:G186292

C;Comment: For an alternative splice form, see PIR:A30368

C;Genetics:

A;Gene: GDB:IL1RN

A;Cross-references: GDB:125897; OMIM:147679

A;Map position: 2q14.2-2q14.2

C;Superfamily: interleukin-1

C;Keywords: alternative splicing; cytokine receptor

F;1-180/Product: interleukin-1 receptor antagonist, long intracellular splice form #status

F;1-3,25-180/Product: interleukin-1 receptor antagonist, short intracellular splice form

Query Match 13.58; Score 155.5; DB 2; Length 180;

Best Local Similarity 30.74; Pred. No. 5.4e-07;

Matches 43; Conservative 26; Mismatches 60; Indels 11; Gaps 6;

Qy 53 KSLNPKKFSYHDDHKVLVDGSLNLIAPVDPKNVIR-PEIFFALASSISASAEKGLILL 111

Db 34 KSSKMQAFRIWDVWQKTFYLRNNQLVA---GYLQGNV--NLEEKIDVVPTEPHAL-FL 86

Qy 112 GVSQGFCELYCDKDKGQSHPSLQKKEKLMKLAQAQASARRPFIYRAQVGSRRMLESAA 171

Db 87 GIHGGKMKCLSVKSGDETR--LQLEAVNITDLSNRRQDKR-FAFIRSDSGPTTSFESAA 143

Qy 172 HPGWFICTSCNCPVGVTD 191

Db 144 CPGWFLCTAMEADQPVSLTN 163

RESULT 5

A54377

interleukin-1 receptor antagonist secreted form precursor - rabbit

C;Species: Oryctolagus cuniculus (domestic rabbit)

C;Date: 06-Oct-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004

C;Accession: A54377; I46729

R;Cominelli, F.; Bortolami, M.; Pizarro, T.T.; Monsacchi, L.; Ferretti, M.; Brewer, M.T. J. Biol. Chem. 269, 6962-6971, 1994

A;Title: Rabbit interleukin-1 receptor antagonist. Cloning, expression, functional characterization

A;Reference number: A54377; MUID:94165101; PMID:7509813

A;Accession: A54377

A;Molecule type: mRNA

A;Residues: 1-177 <COM>

A;Cross-references: UNIPROT:P26890; GB:S68997; NID:G545740; PIDN:AAB30093.1; PID:G545740

A;Experimental source: colon tissue

A;Note: sequence extracted from NCBI backbone (NCBIN:144168, NCBIP:144169)

R;Goto, F.; Goto, K.; Miyata, T.; Ohkawara, S.; Takao, T.; Mori, S.; Furukawa, S.; Maeda Immunology 77, 235-244, 1992

A;Title: Interleukin-1 receptor antagonist in inflammatory exudate cells of rabbits. Production and characterization of a rabbit interleukin-1 receptor antagonist

A;Reference number: I46729; MUID:93052512; PMID:1427977

A;Accession: I46729

A;Status: translated from GB/EMBL/DBJ

A;Residues: 1-267 <VAN>
A;Cross-references: UNIPROT:Q29082; EMBL:X74568; NID:g407899; PIDN:CAA52660.1; PID:g4079
C;Genetics:
A;Introns: 16/2; 33/3; 99/1; 154/1; 197/3
C;Superfamily: interleukin-1

Query Match 10.5%; Score 121; DB 2; Length 267;
Best Local Similarity 27.2%; Pred. No. 0.0014;
Matches 50; Conservative 32; Mismatches 78; Indels 24; Gaps 9;

QY 19 KDRPQ-----CLEDPA---GSPLEGRSL---PTMVFHTGRKVKSLNPKKFSIHDDQ 66
DB 72 KEFPMPPSSQVCDDDPKSIFSSVFEEPIVLEKHANGFLCDATPVQSDCK---LQDKD 128
QY 67 HKVLVLDGSLNIAYPD--KNYIRPEIFPALASSLSASAEGSLILIGVSKGFECLYC-D 123
DB 129 EKALVLGAPHELKALHLLKGLDREVVFQMSFVQGDSDDK-IPVTIGIKKNLYLSVCM 187
QY 124 KDGQSHPSLQKKEKMLKLAQKESARRPFIFYRAQVGRNMLESAAHPGWFICTSCNC 183
DB 188 KD---DPTTLQL--EDVDPKSYPRKDMKRFVFKTEIKNRVBFESALYPNWIYSTQAE 242
QY 184 NEPV 187
DB 243 QKPV 246

RESULT 8
S23010
interleukin-1 beta precursor - sheep
N;Alternate names: hematopoietin-1; IL-1 beta
C;Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 08-Jun-1994 #sequence_revision 22-Nov-1996 #text_change 09-Jul-2004
C;Accession: S23010; S43047; S13092; B61246
R;Seow, H.P.; Rochel, J.S.; David, M.J.; Wood, P.R.
DNA Seq. 1, 423-426, 1991
A;Title: Nucleotide sequence of ovine macrophage interleukin-1 beta cDNA.
A;Reference number: S23010; MUID:92119335; PMID:1840515
A;Accession: S23010
A;Molecule type: mRNA
A;Residues: 1-266 <SPO>
A;Cross-references: UNIPROT:P21621; EMBL:X56972; NID:g1808; PIDN:CAA40293.1; PID:g1809
A;Note: the sequence from Fig. 1 is inconsistent with that from Fig. 2 in having an addi
R;Sargan, D.R.
submitted to the EMBL Data Library, May 1992
A;Reference number: S43047
A;Accession: S43047
A;Molecule type: mRNA
A;Residues: 1-13, 'C', 15-54, 'K', 56-63, 'A', 65-144, 'L', 146-266 <SAR>
A;Cross-references: EMBL:X54796; NID:g1273; PIDN:CAA38566.1; PID:g1274
R;Fiskerstrand, C.; Sargan, D.
Nucleic Acids Res. 18, 7165, 1990
A;Title: Nucleotide sequence of ovine interleukin-1 beta.
A;Reference number: S13092; MUID:91088326; PMID:2263490
A;Accession: S13092
A;Molecule type: mRNA
A;Residues: 1-13, 'C', 15-54, 'K', 56-61, 'S', 63, 'A', 65-144, 'L', 146-266 <FIS>
A;Cross-references: EMBL:X54796
A;Note: the authors translated the codon AGT for residue 62 as Arg
R;Andrews, A.E.; Barcham, G.J.; Brandon, M.R.; Nash, A.D.
Immunology 74, 453-460, 1991
A;Title: Molecular cloning and characterization of ovine IL-1alpha and IL-1beta.
A;Reference number: A61246; MUID:92120716; PMID:1769692
A;Accession: B61246
A;Molecule type: mRNA
A;Residues: 1-144, 'L', 146-266 <AND>
C;Comment: This protein lacks a conventional signal sequence for protein export. Cleavag
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin-1a
C;Genetics:
A;Gene: IL-1-beta
C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen

F;114-266/Product: interleukin-1 beta #status predicted <MAT>
Query Match 10.3%; Score 118.5; DB 1; Length 266;
Best Local Similarity 28.8%; Pred. No. 0.0023;
Matches 38; Conservative 26; Mismatches 59; Indels 9; Gaps 6;

QY 59 KFSIHDDHKVLVLDGSG---NLIAVPDKNYIRPEIFPALASSLSASAEGSLILIGVSK 115
DB 120 KCKLQDREQSLVLDPSVCVLKALHLPSQEMSR-EVVFQCM-SFVQGEERDNKIPVALGIRD 177
QY 116 GEFCLYCDKDGQSHPSLQKKEKMLKLAQKESARRPFIFYRAQVGRNMLESAAHPGW 175
DB 178 KNLYLSCVK-KGDT-PTLQL--EEVDPKYPRKMKRFVFKTEIKNTVEFESVLYPNW 233
QY 176 FICTSCNNEPV 187
DB 234 YISTSQIEEKPV 245

RESULT 9
JN0724
interleukin-1 beta precursor - pig
N;Alternate names: hematopoietin-1; IL-1 beta
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 14-Jul-1994 #sequence_revision 22-Nov-1996 #text_change 09-Jul-2004
C;Accession: JN0724
R;Huetther, M.J.; Lin, G.; Smith, D.M.; Murtaugh, M.P.; Molitor, T.W.
Gene 129, 285-289, 1993
A;Title: Cloning, sequencing and regulation of an mRNA encoding porcine interleukin-1 be
A;Reference number: JN0724; MUID:93314975; PMID:8325511
A;Accession: JN0724
A;Molecule type: mRNA
A;Residues: 1-267 <HUE>
A;Cross-references: UNIPROT:P26889; GB:M86725; NID:g164607; PIDN:AAA02584.1; PID:g164608
A;Experimental source: alveolar macrophage
C;Comment: This protein is a pleiotropic cytokine that mediates a variety of processes i
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin-1a
C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lipoprotein; lymphokine; macrophag
F;115-267/Product: interleukin-1 beta #status predicted <ILI>
F;77/Binding site: myristate (Lys) (covalent) #status predicted

Query Match 10.0%; Score 115; DB 1; Length 267;
Best Local Similarity 28.1%; Pred. No. 0.0049;
Matches 39; Conservative 27; Mismatches 61; Indels 12; Gaps 6;

QY 52 VKSLNPKFSIHDDHKVLVLDGSLNIAYPD--KNYIRPEIFPALASSLSASAEGSLI 109
DB 117 VQSMECK---LQDKDKHKSILVLAGPHMLKALHLLTGDLKREVVFQCM-SFVQGDSDNNKIPV 172
QY 110 LLGVSKGEFCLYC-DKDGQSHPSLQKKEKMLKLAQKESARRPFIFYRAQVGRNMLE 168
DB 173 TLGIKKNLYLSVCMKD---NPTLQL--EDIDPKYPRKDMKRFVFKTEIKNRVEFE 227

QY 169 SRAHPGWFICTSCNNEPV 187
DB 228 SALYPNWIYSTQAEQKPV 246

RESULT 10
IC801B
interleukin-1 beta precursor - bovine
N;Alternate names: hematopoietin-1; IL-1 beta
C;Species: Bos primigenius taurus (cattle)
C;Date: 31-Mar-1989 #sequence_revision 31-Mar-1989 #text_change 09-Jul-2004
C;Accession: JL0010; S01380
R;Walliszewski, C.R.; Baker, P.E.; Schoenborn, M.A.; Davis, B.S.; Cosman, D.; Gillis, S.
Mol. Immunol. 25, 429-437, 1988
A;Title: Cloning, sequence and expression of bovine interleukin 1-alpha and interleukin
A;Reference number: A94695; MUID:88318652; PMID:3261832
A;Accession: JL0010

A;Molecule type: mRNA
A;Residues: 1-266 <NAL>
A;Cross-references: UNIPROT:P09428; GB:M37211; NID:g163200; PIDN:AAA30584.1; PID:g163201
R;Jeong, S.R.; Flagg, G.M.; Lawman, M.; Gray, P.W.
Nucleic Acids Res. 16, 9054, 1988
A;Title: The nucleotide sequence for the cDNA of bovine interleukin-1 beta.
A;Reference number: S01380; MUID:89016591; PMID:3262866
A;Accession: S01380
A;Molecule type: mRNA
A;Residues: 1-251, 'A', 253-266 <LEO>
A;Cross-references: EMBL:X12498; NID:g448; PIDN:CRAA31018.1; PID:g449
C;Comment: This protein is a cytokine that mediates a variety of immunoregulatory and involved form of interleukin-beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-beta precursor is less heavily myristoylated than interleukin-1
C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen
F;I14-266/Product: interleukin-1 beta #status predicted <MAR>

Query Match 9.0%; Score 103.5; DB 1; Length 266;
Best Local Similarity 26.7%; Pred. No. 0.057;
Matches 35; Conservative 25; Mismatches 64; Indels 7; Gaps 5;

Qy 59 KFSIHDDQHVKVLVDGSLNLTAVPD--KNYIRPELPALASSLSASAEKCSILLGVSKG 116
| : : | : : | : : | : : | : : | : : | : : | : : | : : | : :
Db 120 KCKLDREQSLVLAFCVPLKALHLLSQEMNRREVFCM-SFVGQEERDNKIPVALGIKKD 178

Qy 117 EFCLCYCDKGQSHPSQLKKEKLMAAKESARRPPIFYRAQVGSNNMLESAAPGWPF 176
| : : | : : | : : | : : | : : | : : | : : | : : | : : | : :
Db 179 NLYLSCVK-KGDT-FTIQL--EEVDPKVPRNMKEKFVFKYTKNTVEFSVLFPWNY 234

Qy 177 ICTSCNCNEPV 187
| : : | : : | : : | : : | : : | : : | : : | : : | : : | : :
Db 235 ISTSQIERPV 245

RESULT 11
I55969
interleukin-1 beta precursor - mouse
N;Alternate names: hematopoietin-1, IL-1 beta
C;Species: Mus musculus (house mouse)
C;Date: 26-Jul-1996 #sequence_revision 22-Nov-1996 #text_change 09-Jul-2004
C;Accession: I55969; A24719; S13029
R;Gray, P.W.; Glaisner, D.; Chen, E.; Goeddel, D.V.; Pennica, D.
J. Immunol. 137, 3644-3648, 1986
A;Title: Two interleukin 1 genes in the mouse: Cloning and expression of the cDNA for mu
A;Reference number: I55969; MUID:87058957; PMID:33491144
A;Accession: I55969
A;Status: preliminary; translated from GB/EMBL/DBDJ
A;Molecule type: mRNA
A;Residues: 1-269 <RS>
A;Cross-references: UNIPROT:P10749; GB:M15131; NID:g198293; PIDN:AAA39276.1; PID:g309398
R;Telford, J.L.; Macchia, G.; Massone, A.; Carinci, V.; Pallia, E.; Mellii, M.
Nucleic Acids Res. 14, 9955-9963, 1986
A;Title: The murine interleukin 1-beta gene: structure and evolution.
A;Reference number: A24719; MUID:87117546; PMID:3492706
A;Accession: A24719
A;Molecule type: mRNA
A;Residues: 1-269 <TEL>
A;Cross-references: GB:X04964; NID:g52666; PIDN:CAA28637.1; PID:g52667
R;Daumy, G.O.; Wilder, C.L.; Merenda, J.M.; McColl, A.S.; Geoghegan, K.F.; Otterness, I.;
FEBS Lett. 278, 98-102, 1991
A;Title: Reduction of biological activity of murine recombinant interleukin-1beta by sel
A;Reference number: S13029; MUID:91130610; PMID:1993481
A;Accession: S13029
A;Status: preliminary
A;Molecule type: protein
A;Residues: 118-269 <DAU>
C;Comment: This protein lacks a conventional signal sequence for protein export. Cleavag
ved form of interleukin-beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-beta precursor is less heavily myristoylated than interleukin-1
C;Genetics:
A;Gene: IL-1-beta

F;76/Binding site: myristate (Lys) (covalent) #status experimental
F;123/Binding site: carbohydrate (Asn) (covalent) #status absent

Query Match 8.2%; Score 94.5; DB 1; Length 269;
Best Local Similarity 28.4%; Pred. No. 0.39;
Matches 42; Conservative

Qy 45 FVHTSRKVKSLNPKFSIHQDHKVLVDG--NLIAVPDKNY-IRPEIFFALASSLSA 101
 |||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:
Db 113 YVHDA-PVRSLN---CTLRDSQQKSLVM-SGPVELKHLHQGDMEQVVFSMSFVGQEE 167
 |||:|||:|||:|||:|||:
Qy 102 SAEKGSLLILGVSGEGECLYC--DKDGQSHPSLOLKKEKLMLAAQKESARRPFIFYRA 159
 |||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:
Db 168 SNDK-IPVALGLGXEKNLYLCVLIKDDK----PTQL--ESVDPKNYPKKQMKRFFVNKI 220
 |||:|||:|||:|||:|||:
Qy 160 QVGRNMLESAAHPGWFICTSCNCNEPV 187
 |||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:
Db 221 EINKLEFEQAQPNPWYIISTQANMPV 248
 |||:|||:|||:|||:|||:

RESULT 13

JC5646
interleukin-1 beta - horse
C;Species: Equus caballus (domestic horse)
C;Date: 28-Oct-1997 #sequence_revision 28-Oct-1997 #text_change 09-Jul-2004
C;Accession: JC5646
R;Kato, H.; Youn, H.Y.; Ohashi, T.; Watazi, T.; Goitsuka, R.; Tsujimoto, H.; Hagiwara, K.
Gene 177, 11-16, 1996
A;Title: Identification of an alternatively spliced transcript of equine interleukin-1.
A;Reference number: JC5646; MUID:97080493; PMID:8921838
A;Accession: JC5646
A;Molecule type: mRNA
A;Residues: 1-214 <KAT>
A;Cross-references: UNIPROT.Q28386; DDBJ.D42165; NID.G2463549; PIDN.BAA22528.1
C;Comment: This protein mediates a variety of physiological response to infectious agents by hepatocytes, and stimulation of chondrocytes and synovial cells to produce cytokines.
C;Superfamily: interleukin-1

Query Match 7.4%; Score 86; DB 2; Length 214;
Best Local Similarity 23.3%; Pred. No. 1.8;
Matches 34; Conservative

Qy 43 MNFVHTSRKVKSLN-PKFSGIHQDHQVLVDGSLIAVPDKNVIRPEIFFALASSLSA 101
 |||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:
Db 65 MSIIVAVEKLKTPVCSQAQFDLDRLSF-----SVIFEVWFMSFVGQEE 112
 |||:|||:|||:|||:|||:
Qy 102 SAEKGSLLILGVSGEGECLYCDKDGQSHPSLOLKKEKLMLAAQKESARRPFIFYRAQV 161
 |||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:
Db 113 ETDK-IPVALGLGXEKNLYLCGMKGDK--PTQL--ETVDPNTYPPKRMEKRRFFVNKMEI 167
 |||:|||:|||:|||:|||:
Qy 162 GSRNMLESAAHPGWFICTSCNCNEPV 187
 |||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:
Db 168 KGNVEFESAQPNPWYIISTQAESKPV 193
 |||:|||:|||:|||:|||:

RESULT 14

A30584
interleukin-1 beta precursor - rabbit
N;Alternate names: hematopoietin-1; Il-1 beta; lymphocyte proliferation potent factor
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 25-May-1989 #sequence_revision 22-Nov-1996 #text_change 09-Jul-2004
C;Accession: A27714; A30584; J00082; A32166
R;Morio, S.; Goto, F.; Goto, K.; Okikawa, S.; Maeda, S.; Shimada, K.; Yoshinaga, T.
Biochem. Biophys. Res. Commun. 150, 1237-1243, 1988
A;Title: Cloning and sequence analysis of a cDNA for lymphocyte proliferation factor.
A;Reference number: A27714; MUID:88134238; PMID:2449207
A;Accession: A27714
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-268 <MOR>
A;Cross-references: UNIPROT.P14628
R;Cannon, J.G.; Clark, B.D.; Wingfield, P.; Schmeissner, U.; Losberger, C.; Dirlikov, J.
J. Immunol. 142, 2299-2306, 1989

Search completed: September 29, 2005, 11:17:33
Job time : 27.5 secs

RESULT 15

	Query Match	7.4%;	Score 85;	DB 2;	Length 425;
	Best Local Similarity	26.8%;	Pred. No. 5.2;		
	Matches 38;	Conservative 18;	Mismatches 76;	Indels 10;	Gaps 5;
Qy	44	NFVTSRKVSLNPCKFSIHQDDHKVLVDLSDGNLAVDPKQVIRPEIFPALASSLSSASA	103		
Db	9	NIDHEPGSVESQQSTIYSDSDSDSDSFDDDE----	VIPPEQAMRKIEFALADIKQMDN	64	
Qy	104	EKGSILIL-LGVSKSGBFCL-YCDKRGQSHPSLQLKKEKMLKLAQKESARRPPIF-YRAQ	160		
Db	65	KEKSLTTLAISTSKSHFCLRYTAKRKGKLDRLHCLHQVVDLLENDKRSTKRELYYEHKAV	124		
Qy	161	VGSRNMLESAAHPGWFICTSON	182		
Db	125	YGNOKYLDSDSIKS-----ICELAN	143		

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OM protein - protein search, using sw model

Run on: September 29, 2005, 11:03:38 ; Search time 107 Seconds
(without alignments)
1043.302 Million cell updates/sec

Title: US-10-695-195-2
Perfect score: 1155
Sequence: 1 MSFVGENSGVKGMSDEWED.....IEFSQPVCCKAEMSPSEVSD 218

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : UniProt 03.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	1139.5	98.7	219	Q7RU00	Q7RU00 homo sapien
2	1130	97.8	218	IL1F7 HUMAN	Q9nzh6 homo sapien
3	234	20.3	157	Q7RTZ7	Q7RTZ7 homo sapien
4	221	19.1	183	IL1F8 MOUSE	Q9d6z6 mus musculus
5	216.5	18.7	169	IL1F9 HUMAN	Q9nzh8 homo sapien
6	216.5	18.7	169	Q7RTZ9	Q7RTZ9 homo sapien
7	204	17.7	158	IL1F6 HUMAN	Q9ubh7 homo sapien
8	204	17.7	158	Q7RTZ8	Q7RTZ8 homo sapien
9	182.5	15.8	156	IL1F5 MOUSE	Q9gyv1 mus musculus
10	181	15.7	134	Q6UVX7	Q6UVX7 homo sapien
11	175.5	15.2	164	IL1F9 MOUSE	Q8r460 mus musculus
12	168	14.5	160	IL1F6 MOUSE	Q9jla2 mus musculus
13	163.5	14.2	155	IL1F5 HUMAN	Q9ubh0 h interleuk
14	163.5	14.2	155	Q7RTZ6	Q7RTZ6 homo sapien
15	162	14.0	159	Q8CGA1	Q8CGA1 mus musculus
16	161.5	14.0	152	IL1FA MOUSE	Q8r459 mus musculus
17	160	13.9	178	IL1IX MOUSE	P25085 mus musculus
18	155.5	13.5	159	Q7RTZ4	Q7RTZ4 homo sapien
19	155.5	13.5	177	IL1IX HUMAN	P18510 homo sapien
20	153	13.2	174	IL1IX_BOVIN	O77482 bos taurus
21	151.5	13.1	177	IL1IX_RABIT	P26890 oryctolagus
22	151	13.1	177	IL1IX_TURTR	Q9gmz4 turciops tr
23	151	13.1	177	Q866R8	Q866R8 macaca fasc
24	150	13.0	176	IL1IX_CANFA	Q9beh0 canis famil
25	149.5	12.9	177	IL1IX_PIG	Q29056 sus scrofa
26	148.5	12.9	152	IL1FA_HUMAN	Q8wz1 h interleuk
27	148.5	12.9	152	Q7RTZ5	Q7RTZ5 homo sapien
28	147.5	12.8	178	IL1IX_RAT	P25086 rattus norv
29	140.5	12.2	177	IL1IX_HORSE	IL1HY1: A novel inter
30	139	12.0	267	Q73909	IL18999 equus cabal
31	133.5	11.6	272	Q9DDF2	Q9DDF2 cyprinus ca

RESULT 1

ID	Q7RU00	PRELIMINARY;	PRT;	219 AA.
AC	Q7RU00;			
DT	01-MAR-2004 (TREMBLrel. 26, Created)			
DT	01-MAR-2004 (TREMBLrel. 26, Last sequence update)			
DT	01-MAR-2004 (TREMBLrel. 26, Last annotation update)			
DE	IL-1F7b (IL-1H4, IL-1H, IL-1RP1).			
OS	Homo sapiens (Human)			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RP	MEDLINE=20545212; PubMed=11093146;			
RX	DOI=10.1002/1521-4141(200011)30:11<3299::AID-IMMU3299>3.0.CO;2-S;			
RA	Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.;			
RA	"A tissue specific IL-1 receptor antagonist homolog from the IL-1			
RT	cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";			
RL	Eur. J. Immunol. 30:3299-3308(2000).			
RN	[2]			
RP	SEQUENCE FROM N.A.			
RP	MEDLINE=97312693; PubMed=9169134; DOI=10.1006/geno.1997.4654;			
RA	Nothwang H.G., Strahm B., Denich D., Kuebler M., Schwabe J.,			
RA	Gingrich J.C., Jauch A., Cox A., Nicklin M.J.H., Kurnit D.M.,			
RA	Hildebrandt P.;			
RT	"Molecular cloning of the interleukin-1 gene cluster: construction of			
RT	an integrated YAC/PAC contig and a partial transcriptional map in the			
RL	region of chromosome 2q13.";			
RL	Genomics 41:370-378(1997).			
RN	[3]			
RP	SEQUENCE FROM N.A.			
RP	MEDLINE=94245215; PubMed=8188271;			
RX	Nicklin M.J.H., Weith A., Duff G.W.;			
RA	"A Physical map of the region encompassing the human interleukin-1-			
RT	alpha, interleukin-1-beta and interleukin-1 receptor genes.";			
RL	Genomics 19:382-384(1994).			
RN	[4]			
RP	SEQUENCE FROM N.A.			
RP	MEDLINE=21988050; PubMed=11991722; DOI=10.1006/geno.2002.6751;			
RX	Nicklin M.J.H., Barton J.L., Nguyen M., Fitzgerald M.G., Duff W.G.,			
RA	Kornman K.;			
RT	"A sequence-based map of the nine genes of the human interleukin-1			
RT	cluster.";			
RL	Genomics 79:718-725(2002).			
RN	[5]			
RP	SEQUENCE FROM N.A.			
RP	MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;			
RX	Mulero J.J., Pace A.M., Nelken S.T., Loeb D.D., Correa T.R.,			
RA	Drmanac R., Ford J.E.;			
RT	"IL1HY1: A novel interleukin-1 receptor antagonist gene.";			
RL	Biochem. Biophys. Res. Commun. 263:702-706(1999).			
RN	[6]			
RP	SEQUENCE FROM N.A.			

Q8axv9 carassius a
Q7t056 brachydanio
Q6puj3 sus scrofa
Q9ddf3 cyprinus ca
Q6iwh5 salmo salar
Q712j8 carassius a
Q57398 cyprinus ca
Q9pw18 cyprinus ca
Q9nzh7 homo sapien
Q9ygd3 oncorhynch
Q8uuc3 oncorhynch
Q29082 sus scrofa
P21621 ovis aries
Q8axv8 carassius a

RX MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
RA Smith D.E., Renshaw B.R., Ketchum R.R., Rubin M., Garka K.E.,
RA Sims J.E.;
RT "Four new members expand the interleukin-1 superfamily.";
RL J. Biol. Chem. 275:1169-1175(2000).
RN [7]
RP SEQUENCE FROM N.A.
RX MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
RT the interleukin-1 family.";
RL J. Biol. Chem. 275:10308-10314(2000).
RN [8]
RP SEQUENCE FROM N.A.
RX MEDLINE=20318623; PubMed=10860666; DOI=10.1006/geno.2000.6184;
RA Busfield S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
RA Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
RT "Identification and gene organization of three novel members of the
RT IL-1 family on human chromosome 2.";
RL Genomics 66:213-216(2000).
RN [9]
RP SEQUENCE FROM N.A.
RX MEDLINE=21066552; PubMed=11145836; DOI=10.1006/cyto.2000.0799;
RA Pan G., Risse P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
RA Yansura D., Lewis L., Eigenbrot C., Henzel W.J., Vandlen R.;
RT "IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
RT 1rp.";
RL Cytokine 13:1-7(2001).
RN [10]
RP SEQUENCE FROM N.A.
RX MEDLINE=21282953; PubMed=11278614; DOI=10.1074/jbc.M010095200;
RA Lin H.S., Ho A.S., Haley-Vicente D., Zhang J., Bernal-Fussell J.,
RA Pace A.M., Hansen D., Schweighofer K., Mize N.K., Ford J.E.;
RT "Cloning and characterization of IL-1H2, a novel interleukin-1 family
RT member.";
RL J. Biol. Chem. 276:20597-20602(2001).
RN [11]
RP SEQUENCE FROM N.A.
RX MEDLINE=21359532; PubMed=11466363;
RA Debets R., Rimans J.C., Honey B., Zurawski S., Sana T.R., Lo S.,
RA Wegner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
RA Kastelein R.A.;
RT "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
RT as an antagonist and agonist of NF-kB activation through the orphan
RT IL-1 receptor-related protein 2.J. Immunol. 167: 1440-1446.";
RL J. Immunol. 167:1440-1446(2001).
RN [12]
RP SEQUENCE FROM N.A.
RX MEDLINE=21459116; PubMed=11574262; DOI=10.1016/S1471-4906(01)02040-3;
RA Sims J.E., Nicklin M.J., Bazan J.F., Barton J.L., Busfield S.J.,
RA Ford J.E., Kastelein R.A., Kumar S., Lin H., Mulero J.J., Pan G.,
RA Pan Y., Smith D.E., Young P.R.;
RT "A new nomenclature for the IL-1 family genes.";
RL Trends Immunol. 22:536-537(2001).
CC -1- MISCCELLANEOUS: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ third party annotation (TPA) entry.
CC -1- SIMILARITY: Belongs to the IL-1 family.
DR EMBL; BN000002; CAD29873.1; -.
DR HSP; Q9QY11; IMD6.
DR GO; GO:0005576; C:extracellular; IEA.
DR GO; GO:0005152; F:interleukin-1 receptor antagonist activity; IEA.
DR GO; GO:0006955; P:immune response; IEA.
DR InterPro; IPR008996; Cytok IL1 like.
DR InterPro; IPR003297; InterleukinIL1RA.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR PRINTS; PR00264; INTERLEUKIN1.
DR PRINTS; PR01360; INTRLEUKIN1X.
DR ProDom; PD002536; Interleukin_1; 1.
SQ SEQUENCE 219 AA; 24242 MW; 10EBA0881DF25C41 CRC64;

Query Match 98.7%; Score 1139.5; DB 2; Length 219;
Best Local Similarity 99.1%; Pred. NO. 1.3e-92;
Matches 217; Conservative 1; Mismatches 0; Indels 1; Gaps 1;
QY 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAQSPLPQPSLPTNFWHTSRKVKSLNPKKF 60
DB 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAQSPLPQPSLPTNFWHTSRKVKSLNPKKF 60
QY 61 SIHQDQHKVLVLDGSLNLIIVDPKNIYRPIFFALASSLSASAEKSGSLILLGVSKGEFCL 120
DB 61 SIHQDQHKVLVLDGSLNLIIVDPKNIYRPIFFALASSLSASAEKSGSLILLGVSKGEFCL 120
QY 121 YCDKDGQSHPSQLKKEKLMKLAQKESARRRPIFYRAQVGSNNMLESAAHGWFCITS 180
DB 121 YCDKDGQSHPSQLKKEKLMKLAQKESARRRPIFYRAQVGSNNMLESAAHGWFCITS 180
QY 181 CNCNEPVGVTDKPENKHIIEFSQP-VCKAEMSPSEVSD 218
DB 181 CNCNEPVGVTDKPENKHIIEFSQP-VCKAEMSPSEVSN 219
RESULT 2
IL1F7 HUMAN STANDARD; PRT: 218 AA.
ID 11F7 HUMAN STANDARD; PRT: 218 AA.
AC QNZH6; Q8TD04; Q8HBF2; Q9HBF3; Q9UHA6;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Interleukin 1 family member 7 precursor (IL-1F7) (Interleukin-1 zeta)
DE (IL-1 zeta) (Interleukin-1 homolog 4) (IL-1H4)
DE (Interleukin-1-related protein) (IL-1RP1) (IL-1X protein).
DE Names=IL1F7; Synonyms=FIL1Z, IL1H4, IL1RP1;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM B).
RC TISSUE=Fetal B-cell, Fetal colon, Fetal lung, and Fetal testis;
RX MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
RT the interleukin-1 family.";
RL J. Biol. Chem. 275:10308-10314(2000).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM B).
RC TISSUE=Colon carcinoma;
RA Manoj P.P., Mantovani A., Muzio M.;
RL Submitted (JUL-1999) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A. (ISOFORMS B AND C), SEQUENCE OF 46-54, AND VARIANTS
VAL-31 AND ALA-42.
RX MEDLINE=21066552; PubMed=11145836; DOI=10.1006/cyto.2000.0799;
RA Pan G., Risse P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
RA Yansura D., Lewis L., Eigenbrot C., Henzel W.J., Vandlen R.;
RT "IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
RT 1rp.";
RL Cytokine 13:1-7(2001).
RN [4]
RP SEQUENCE FROM N.A. (ISOFORM A).
RX MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
RA Smith D.E., Renshaw B.R., Ketchum R.R., Rubin M., Garka K.E.,
RA Sims J.E.;
RT "Four new members expand the IL-1 superfamily.";
RL J. Biol. Chem. 275:1169-1175(2000).
RN [5]
RP SEQUENCE FROM N.A. (ISOFORMS D AND E).
RX MEDLINE=21988051; PubMed=11991723; DOI=10.1006/geno.2002.6752;
RA Taylor S.L., Renshaw B.R., Garka K.E., Smith D.E., Sims J.E.;
RT "Genomic organization of the interleukin-1 locus.";
RL Genomics 79:726-733(2002).

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RN  [6]
RP  SEQUENCE FROM N.A. (ISOFORM B), AND VARIANTS VAL-31 AND ALA-42.
RC  TISSUE=Placenta;
RX  MEDLINE=22389257; PubMed=12477932; DOI=10.1073/pnas.2426038999;
RA  Strausberg R.L., Feingold B.A., Grouse L.H., Derge J.G.,
RA  Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA  Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA  Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA  Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA  Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA  Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA  Raha S.S., Lequellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA  Bobak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA  Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA  Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA  Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA  Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA  Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA  Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallus D.B.,
RA  Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT  "Generation and initial analysis of more than 15,000 full-length human
RL  and mouse cDNA sequences."
CC  Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
CC  -1- FUNCTION: Binds to interleukin-18 receptor (IL-18R) receptor but
CC  not to IL-1 receptor. Could be a new player in the inflammatory
CC  and immune responses mediated by the IL-18/IL-18R axis.
CC  -1- SUBCELLULAR LOCATION: Secreted.
CC  -1- ALTERNATIVE PRODUCTS:
CC  Event=Alternative splicing; Named isoforms=5;
CC  Name=B;
CC  IsoId=Q9NZH6-1; Sequence=Displayed;
CC  Name=A;
CC  IsoId=Q9NZH6-2; Sequence=VSP_002653;
CC  Name=C;
CC  IsoId=Q9NZH6-3; Sequence=VSP_002656;
CC  Name=D;
CC  IsoId=Q9NZH6-4; Sequence=VSP_002654;
CC  Name=E;
CC  IsoId=Q9NZH6-5; Sequence=VSP_002655;
CC  -1- TISSUE SPECIFICITY: Isoforms A, B and C are expressed in testis,
CC  colon, placenta, lung and lymph node. Isoforms D and E were found
CC  only in testis and bone marrow. Whereas only isoform A is found in
CC  brain, only isoform B in kidney and only isoform C in heart.
CC  -1- INDUCTION: By phorbol ester (PMA) in different cell lines.
CC  -1- SIMILARITY: Belongs to the IL-1 family.
CC  -----
CC  This SWISS-PROT entry is copyright. It is produced through a collaboration
CC  between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC  the European Bioinformatics Institute. There are no restrictions on its
CC  use by non-profit institutions as long as its content is in no way
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CC  entities requires a license agreement (See http://www.ebi-sib.ch/announce/
CC  or send an email to license@ebi-sib.ch).
CC  -----
DR  EMBL; AF200496; AAF69252.1; -
DR  EMBL; AF167368; AAG29344.1; -
DR  EMBL; AF251118; AAG14420.1; -
DR  EMBL; AF251120; AAG14422.1; -
DR  EMBL; AF251119; AAG14421.1; -
DR  EMBL; AF201832; AAF25212.1; -
DR  EMBL; AY071840; AAL67151.1; -
DR  EMBL; AY071841; AAL67154.1; -
DR  EMBL; BC020637; AAH20637.1; -
DR  HSSP; P18510; 1IL1F.
DR  Genew; HGNC:15563; IL1F7.
DR  H-InvDB; HIX0002387; -.
DR  MIM; 605510; -.
DR  GO; GO:0005576; C:extracellular; TAS.
DR  GO; GO:0005149; F:interleukin-1 receptor binding; NAS.
DR  GO; GO:0006955; P:immune response; NAS.
DR  InterPro; IPR008996; Cytok IL1 like.
DR  InterPro; IPR000975; Interleukin_1.

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DR  Pfam; PF00340; IL1; 1.
DR  PRINTS; PR00264; INTERLEUKIN1.
DR  ProDom; PD002536; Interleukin_1; 1.
DR  SMART; SM00125; IL1; 1.
KW  PROSITE; PS00253; INTERLEUKIN_1; FALSE_NEG.
KW  Alternative splicing; Cytokine; Direct protein sequencing;
KW  Multigene family; Polymorphism.
FT  PROPEP 1 45 Removed in mature form.
FT  CHAIN 46 218
FT  VARSPLIC 1 49
FT  VARSPLIC 28 49
FT  VARSPLIC 28 88
FT  VARSPLIC 49 89
FT  VARIANT 31 31
FT  VARIANT 42 42
FT  SEQUENCE 218 AA; 24126 MW; 96E089310D2CEA68 CRC64;
Query Match 97.8%; Score 1130; DB 1; Length 218;
Best Local Similarity 98.2%; Pred. No. 8.8e-92;
Matches 214; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 1 MSFVGENSGVKMGSEDEKDEPOCCLDPAGSPLEPGPSLPTMNFVHTSRVKSLNPKKF 60
DB 1 MSFVGENSGVKMGSEDEKDEPOCCLDPAGSPLEPGPSLPTMNFVHTSPVKVNLNPKKF 60
QY 61 SIHQDQHKVLVLDGSLNLIAPVDKNYIRPEIFFALASSLSASAKGSLILGVSGKEFCL 120
DB 61 SIHQDQHKVLVLDGSLNLIAPVDKNYIRPEIFFALASSLSASAKGSPILLGVSGKEFCL 120
QY 121 YCDKDKQSHPSLQKKEKLMKLAQKESARRPFIYRAQVGSNNMLESAAHPGWFICTS 180
DB 121 YCDKDKQSHPSLQKKEKLMKLAQKESARRPFIYRAQVGSNNMLESAAHPGWFICTS 180
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DB 181 CNCNEPVGVTDKPENRKHIFSFQPVCKAEMSPSEVSD 218
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AC Q7RTZ7
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DS IL-1F8 (FLL1-eta).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20545212; PubMed=110931146;
RX DOI=10.1002/1521-4141(200011)30:11<3299::AID-IMMUJ2399>3.0.CO;2-S;
RA Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.;
RA "A tissue specific IL-1 receptor antagonist homolog from the IL-1
RA cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities."
RA Eur. J. Immunol. 30:3299-3308 (2000).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97312693; PubMed=9169134; DOI=10.1006/geno.1997.4654;
RA Nothwang H.G., Strahm B., Denich D., Kuebler M., Schwabe J.,
RA Gingrich J.C., Jauch A., Cox A., Nicklin M.J.H., Kurnit D.M.,

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RA Hildebrandt F.;
RT "Molecular cloning of the interleukin-1 gene cluster: construction of
RT an integrated YAC/PAC config and a partial transcriptional map in the
RT region of chromosome 2q13.";
RL Genomics 41:370-378(1997).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=94245215; PubMed=818271;
RA Nicklin M.J.H., Weith A., Duff G.W.;
RT "A physical map of the region encompassing the human interleukin-1-
RT alpha, interleukin-1-beta and interleukin-1 receptor genes.";
RL Genomics 19:382-384(1994).
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE=21988050; PubMed=11991722; DOI=10.1006/geno.2002.6751;
RA Nicklin M.J.H., Barton J.L., Nguyen M., Fitzgerald M.G., Duff W.G.,
RA Kornman K.;
RT "A sequence-based map of the nine genes of the human interleukin-1
RT cluster.";
RL Genomics 79:718-725(2002).
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;
RA Mulero J.J., Pace A.M., Nelken S.T., Loeb D.D., Correa T.R.,
RA Drmanac R., Ford J.E.;
RT "IL1HV1: A novel interleukin-1 receptor antagonist gene.";
RL Biochem. Biophys. Res. Commun. 263:702-706(1999).
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
RA Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M., Garka K.E.,
RA Sims J.E.;
RT "Four new members expand the interleukin-1 superfamily.";
RL J. Biol. Chem. 275:1169-1175(2000).
RN [7]
RP SEQUENCE FROM N.A.
RX MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper B.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
RT the interleukin-1 family.";
RL J. Biol. Chem. 275:10308-10314(2000).
RN [8]
RP SEQUENCE FROM N.A.
RX MEDLINE=20318623; PubMed=10860666; DOI=10.1006/geno.2000.6184;
RA Busfield S.J., Comack C.A., Yu G., Chickering T.W., Smutko J.S.,
RA Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
RT "Identification and gene organization of three novel members of the
RT IL-1 family on human chromosome 2.";
RL Genomics 66:213-216(2000).
RN [9]
RP SEQUENCE FROM N.A.
RX MEDLINE=21066552; PubMed=11145836; DOI=10.1006/cyto.2000.0799;
RA Pan G., Kisser P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
RA Yansura D., Lewis L., Eigenbrot C., Henzel W.J., Vandlen R.;
RT "IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
RT 1RP.";
RL Cytokine 13:1-7(2001).
RN [10]
RP SEQUENCE FROM N.A.
RX MEDLINE=21289532; PubMed=11278614; DOI=10.1074/jbc.M010095200;
RA Lin H.S., Ho A.S., Haley-Vicente D., Zhang J., Bernal-Fussel J.,
RA Pace A.M., Hansen D., Schweighofer K., Mize N.K., Ford J.E.;
RT "Cloning and characterization of IL-1HV2, a novel interleukin-1 family
RT member.";
RL J. Biol. Chem. 276:20597-20602(2001).
RN [11]
RP SEQUENCE FROM N.A.
RX MEDLINE=21359532; PubMed=11466363;
RA Debets R., Timans J.C., Honey B., Zurawski S., Sana T.R., Lo S.,
RA Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
RA Kastlein R.A.;

RT "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
RT as an antagonist and agonist of NF-kB activation through the orphan
RT J. Immunol. 167:1440-1446(2001).
RN [12]
RP SEQUENCE FROM N.A.
RX MEDLINE=21459116; PubMed=11574262; DOI=10.1016/S1471-4906(01)02040-3;
RA Sims J.E., Nicklin M.J., Bazan J.F., Barton J.L., Busfield S.J.,
RA Ford J.E., Kastlein R.A., Kumar S., Lin H., Mulero J.J., Pan G.,
RA Pan Y., Smith D.E., Young P.R.;
RT "A new nomenclature for the IL-1-family genes.";
RL Trends Immunol. 22:536-537(2001).
CC -I- MISCELLANEOUS: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ third party annotation (TPA) entry.
CC -I- SIMILARITY: Belongs to the IL-1 family.
CC EMBL: BN000002; CAD29876.1; -.
DR HSSP: Q9QYV1; 1MD6.
DR GO: GO:0005576; C:extracellular; IEA.
DR GO: GO:0005149; F:interleukin-1 receptor binding; IEA.
DR GO: GO:0006955; P:immune response; IEA.
DR GO: GO:0006954; P:inflammatory response; IEA.
DR InterPro: IPR008996; Cytok_IL1_like.
DR InterPro: IPR003294; InterleukinIL1AB.
DR InterPro: IPR003296; InterleukinIL1B.
DR InterPro: IPR000975; Interleukin_1.
DR Pfam: PF00340; IL1; 1.
DR PRINTS: PR00264; INTERLEUKIN1.
DR PRINTS: PR01359; INTRLEUKIN1B.
DR PRINTS: PR01357; INTRLEUKIN1AB.
DR ProDom: PD002536; Interleukin_1; 1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
SQ SEQUENCE 157 AA; 17702 MW; 7A54F3D7557A3BE3 CRC64;
Query Match 20.3%; Score 234; DB 2; Length 157;
Best Local Similarity 34.8%; Pred. No. 1e-12;
Matches 47; Conservative 34; Mismatches 50; Indels 4; Gaps 3;
QY 57 PKFSTHDQDKVLDLSDGNLIAPDKNYRPIFFALA-SLSSASAEEKSLILIGVSK 115
DB 9 PKSYARDSRQMVVVLGNSLIAPLSRSIKPTVLHLIACRDTFDFKGNVYLGK 68
QY 116 GFCLYCDKDGSHPSLQKKEKLMKLAQKESARRPFYRAQVGRNMLESAHPGW 175
DB 69 KDLCLFCAEQGK-PTLQKKNIMDLVYEKK-AQKPLFFHNKSGTSVFQSVPGW 125
QY 176 FICTSCNCPVGVGT 190
DB 126 FIATSTTSGQPIFLT 140
RESULT 4
IL1F8 MOUSE
ID IL1F8 MOUSE STANDARD; PRT; 183 AA.
AC Q9D6Z6; Q8R461;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Interleukin 1 family member 8 (IL-1F8).
GN Name=il1f8; Synonyms=Filie;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Swiss Webster / NIH;
RX MEDLINE=21988051; PubMed=11991723; DOI=10.1006/geno.2002.6752;
RA Taylor S.L., Renshaw B.R., Garka K.E., Smith D.E., Sims J.E.;
RT "Genomic organization of the interleukin-1 locus.";
RL Genomics 79:726-733(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Tongue;

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RX MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA Nikaide I., Osato N., Saito R., Suzuki H., Yamana H., Kiyosawa H.,
RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Dalla E., Dragani T.A., Fletcher C.P., Forrest A., Frazer K.S.,
RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmerond S., Guetlich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Kanai A., Kawai H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Maglott D.R., Maltzik L., Marchionni L., McKenzie L., Miki H.,
RA Nagashima T., Nunata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA Sandelin A., Schneider C., Sempke C.A., Setou M., Shimada K.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA Verardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C.,
RA Wilmig L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA Hara A., Hashizume W., Imotani K., Iehii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Birney E., Hayashizaki Y.;
RA "Analysis of the mouse transcriptome based on functional annotation of
RA 60,770 full-length cDNAs";
RA Nature 420:563-573(2002).
CC -1- SUBCELLULAR LOCATION: Secreted (Potential).
CC -1- SIMILARITY: Belongs to the IL-1 family.
CC
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; AY071842; AAL67152.1; ALT_INIT.
CC EMBL; AK009787; BAB26505.1; -.
CC HSPB; P01584; IL2H.
CC MGD; MGI:1916927; Il1f8.
CC InterPro; IPR008996; Cytok IL1 like.
CC InterPro; IPR000975; Interleukin_1.
CC Pfam; PF00340; IL1; 1.
CC PRINTS; PR00264; INTERLEUKIN1.
CC ProDom; PD002536; Interleukin_1; 1.
CC SMART; SM00125; IL1; 1.
CC PROSITE; PS00253; INTERLEUKIN_1; 1.
KW Cytokine; Multigene family.
SQ SEQUENCE 183 AA; 20878 MW; A3ACE339BF96F02F CRC64;

Query Match 19.1%; Score 221; DB 1; Length 183;
Best Local Similarity 32.3%; Pred. No. 1.7e-11;
Matches 53; Conservative 31; Mismatches 62; Indels 18; Gaps 6;

QY 22 POCLEDPAAGSLEPGPSL-----PTMNFVHTSRKVKSLNPKKFSHTDQDKVLVDGSL 77
DB 6 PQSCVH-----VLPPKIQIOWEPNHTMGS-----SQSPNRYRVDSDQWVLTGNTL 55
QY 78 IAVPDQNYRPIPFALLA-SLSSASAEKGSILILGVSKGBEFLCYCDKKGQSHPSLQK 136
DB 56 TAVPASNVKPVLSLIACRDTFQDVKVKNLVLFGIKRNLFCFCVMEBGK--PTLQLK 113
QY 137 KEKLMKLAQKESARRPIFYRAQVGRNMLESAHPGWFCTS 180
DB 114 EVDIMNLKYERK-AQKAEFLVHGIEGSTSVFQSVLYPGWFATS 156

RESULT 5

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I1F9 HUMAN
ID I1F9 HUMAN STANDARD; PRT; 169 AA.
AC QNZH8;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Interleukin 1 family member 9 (IL-1F9) (Interleukin-1 homolog 1) (IL-
DE 1H1) (Interleukin-1 epsilon) (IL-1 epsilon) (IL-1 related protein 2)
DE (IL-1RP2).
DE Name=IL1F9; Synonyms=IL1E, IL1H1, IL1RP2;
DE Homo sapiens (Human).
DE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RP TISSUE=Keratinocytes;
RX MEDLINE=2029405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
RX Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RX Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RX Young P.R.;
RX "Identification and initial characterization of four novel members of
RX the interleukin-1 family.";
RX J. Biol. Chem. 275:10308-10314(2000).
RX [2]
RX SEQUENCE FROM N.A., AND CHARACTERIZATION.
RX TISSUE=Epithelium;
RX MEDLINE=21359532; PubMed=11466363;
RX Debets R., Timans J.C., Honey B., Zurawski S., Sana T.R., Lo S.,
RX Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
RX Kastelein R.A.;
RX "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
RX as an antagonist and agonist of NF-kappa B activation through the
RX orphan IL-1 receptor-related protein 2.";
RX J. Immunol. 167:1440-1446(2001).
RX [3]
RX SEQUENCE FROM N.A.
RX MEDLINE=20318623; PubMed=10860666; DOI=10.1006/geno.2000.6184;
RX Buafeld S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
RX Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
RX "Identification and gene organization of three novel members of the
RX IL-1 family on human chromosome 2.";
RX Genomics 66:213-216(2000).
RX -1- FUNCTION: Function as an agonist of NF-kappa B activation through
RX the orphan IL-1-receptor-related protein 2. Could constitute part
RX of an independent signaling system analogous to interleukin-1
RX alpha (IL-1A), beta (IL-1B) receptor agonist and interleukin-1
RX receptor type I (IL-1RI), that is present in epithelial barriers
RX and takes part in local inflammatory response.
RX -1- SUBCELLULAR LOCATION: Secreted.
RX -1- TISSUE SPECIFICITY: Highly expressed in tissues containing
RX epithelial cells: skin, lung, stomach and esophagus. In skin is
RX expressed only in keratinocytes but not in fibroblasts,
RX endothelial cells or melanocytes. Up-regulated in lesional
RX psoriasis skin.
RX -1- INDUCTION: By TNF-alpha and by IFN-gamma in keratinocytes.
RX -1- SIMILARITY: Belongs to the IL-1 family.
CC
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CC
CC EMBL; AF200492; AAF69248.1; -.
CC EMBL; AF206696; AAG35670.1; -.
CC HSPB; P18510; IL1R.
CC Genew; HGNC:15741; IL1F9.
CC MIM; 605542; -.
CC GO; GO:0007267; P:cell-cell signaling; TAS.
CC GO; GO:0009613; P:response to pest/pathogen/parasite; TAS.

```



```
DR InterPro; IPR008996; Cytok IL1 like.
DR InterPro; IPR003297; Interleukin1L1RA.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR PRINTS; PR00264; INTERLEUKINI.
DR PRINTS; PR01360; INTERLEUKIN1X.
DR ProDom; PD002536; Interleukin_1; 1.
SQ SEQUENCE 169 AA; 18721 MW; F00A9243706F4154 CRC64;

Query Match 18.7%; Score 216.5; DB 2; Length 169;
Best Local Similarity 37.6%; Pred. No. 3.9e-11;
Matches 50; Conservative 26; Mismatches 52; Indels 5; Gaps 4;

Qy 61 SIHDDHKVLVDGSLNLIAPDKNVIKPIFFALASSLSASAE-KGSLILLGVSKGEFC 119
Db 26 TINDLNQVWTLQONLVAPRSVTVVAVITCKYPEALEQGRGDPYVLGIQNPFC 85

Qy 120 LYCDKRGQSHPSLQKKEKLMKLAQKESARRPIFYRAQVGRNMLESAHFGWFICT 179
Db 86 LYCEKVGEO--PTLQKEQKIMLYGQPEPV-KPFLFYRAKTGRSTLTLESVAFPDWFIAS 142

Qy 180 SCNCNEPVGVTDK 192
Db 143 S-KRDQPIILTSE 154

RESULT 7
ID IL1F6_HUMAN STANDARD; PRT; 158 AA.
*AC Q9UHA7;
DT 28-PEB-2003 (Rel. 41, Created)
DT 28-PEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Interleukin 1 family member 6 (IL-1F6) (interleukin-1 epsilon) (IL-1
DE epsilon) (F1I1 epsilon).
GN Name=IL1F6; Synonyms=FI1E, IL1E;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;
[1]
SEQUENCE FROM N.A.
RX MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
RA Smith D.E.; Renshaw B.R.; Ketchum R.R.; Kubin M.; Garka K.E.;
RA Sims J.E.;
RL "Four new members expand the IL-1 superfamily.";
RT J. Biol. Chem. 275:1169-1175(2000).
CC -1- SUBCELLULAR LOCATION: Secreted (Potential).
CC -1- TISSUE SPECIFICITY: Expressed in immune system and fetal brain,
CC but not in other tissues tested or in multiple hematopoietic cell
CC lines.
CC -1- MISCELLANEOUS: Binding analysis failed to detect interaction with
CC multiple IL1R family members.
CC -1- SIMILARITY: Belongs to the IL-1 family.
CC
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CC
CC -----
CC EMBL; AF201831; AAF25211.1; -.
CC HSSP; P01584; IL2H.
CC Genew; HGNC:15562; IL1F6.
CC MIM; 605509;
CC GO; GO:0005576; C:extracellular; NAS.
CC GO; GO:0005149; F:interleukin-1 receptor binding; NAS.
CC GO; GO:0006955; P:immune response; NAS.
CC InterPro; IPR008996; Cytok IL1 like.
CC InterPro; IPR000975; Interleukin_1.
CC Pfam; PF00340; IL1; 1.

PRINTS; PR00264; INTERLEUKINI.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; FALSE_NEG.
KW Cytokine; Multigene family.
SQ SEQUENCE 158 AA; 17684 MW; 469AC84306B0E280 CRC64;

Query Match 17.7%; Score 204; DB 1; Length 158;
Best Local Similarity 35.1%; Pred. No. 4.6e-10;
Matches 54; Conservative 28; Mismatches 66; Indels 6; Gaps 4;

Qy 50 RKVSLNPKKFSHTDQHKVLVDGSLNLIAPDKNVIKPIFFALAS--SLSSASAEKGS 107
Db 3 KALKIDTPQOGSIQDINHRVWLQDTLIAVPRKORMSP-VTIALISCRHVETLEKDRGN 61

Qy 108 LILLGVSKGEFCILYCDKDKQSHPSLQKKEKLMKLAQKESARRPIFYRAQVGRNML 167
Db 62 PIVLGLNGLNLCMLCAKVGQD--PTLQKEKIMLYNQPEPV-KSFLFYHQSQRNMTF 118

Qy 168 ESAAHPGWFICTSCNCNEPVGVTDKFENRKHIEF 201
Db 119 ESWAFPGWFIATVSSEGGCPILLTQELGKANTDF 152

RESULT 8
Q7RTZ8 PRELIMINARY; PRT; 158 AA.
AC Q7RTZ8;
DT 01-MAR-2004 (TREMBLrel. 26, Created)
DT 01-MAR-2004 (TREMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE IL-1F6 (F1L-1-epsilon).
GN Name=IL1F6;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;
[1]
SEQUENCE FROM N.A.
RX MEDLINE=20545212; PubMed=11093146;
RX DOI=10.1002/1521-4141(200011)30:11<3299::AID-IMMUJ299>3.0.CO;2-S;
RA Barton J.L.; Herbst R.; Bosio L.; Higgins L.; Nicklin M.J.;
RT "A tissue specific IL-1 receptor antagonist homolog from the IL-1
RT cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";
RL Eur. J. Immunol. 30:3299-3308(2000).
[2]
SEQUENCE FROM N.A.
RX MEDLINE=97312693; PubMed=9169134; DOI=10.1006/geno.1997.4654;
RA Notwang H.G.; Strahm B.; Denich D.; Kuebler M.; Schwabe J.;
RA Gingrich J.C.; Jauch A.; Cox A.; Nicklin M.J.H.; Kurnit D.M.;
RA Hildebrandt F.;
RT "Molecular cloning of the interleukin-1 gene cluster: construction of
RT an integrated YAC/PAC contig and a partial transcriptional map in the
RT region of chromosome 2q13.";
RL Genomics 41:370-378(1997).
[3]
SEQUENCE FROM N.A.
RX MEDLINE=94245215; PubMed=8188271;
RA Nicklin M.J.H.; Welch A.; Duff G.W.;
RT "A Physical map of the region encompassing the human interleukin-1-
RT alpha, interleukin-1-beta and interleukin-1 receptor genes.";
RL Genomics 19:382-384(1994).
[4]
SEQUENCE FROM N.A.
RX MEDLINE=21988050; PubMed=11991722; DOI=10.1006/geno.2002.6751;
RA Nicklin M.J.H.; Barton J.L.; Nguyen M.; Fitzgerald M.G.; Duff W.G.;
RA Kornman K.;
RT "A sequence-based map of the nine genes of the human interleukin-1
RT cluster.";
RL Genomics 79:718-725(2002).
[5]
SEQUENCE FROM N.A.
RX MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;
```


[illegible]

US MUS MUSCULUS (MOUSE).
Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi:

DR MGD; MGI:1859324; IL1f6.
 DR InterPro; IPR008996; Cytok IL1 like.
 DR InterPro; IPR008975; Interleukin_1.
 DR Pfam; PF00340; IL1; 1.
 DR PRINTS; PR00264; INTERLEUKIN1.
 DR ProDom; PD002536; Interleukin_1; 1.
 DR SMART; SM00125; IL1; 1.
 DR PROSITE; PS00253; INTERLEUKIN_1; FALSE_NEG.
 DR CycKine; Multigene family.
 KW CYCOKINE; Multigene family.
 SQ SEQUENCE 160 AA; 18015 MW; AA0434D69FF62F4A CRC64;
 Query Match 14.5%; Score 168; DB 1; Length 160;
 Best Local Similarity 29.8%; Pred. No. 7.1e-07;
 Matches 42; Conservative 29; Mismatches 64; Indels 6; Gaps 4;
 QY 46 VHSRKVKSLNPKKFSIHDPKHVLDSGNLIAPDKNYIRPEIFAL-ASSLSASAE 104
 DB 1 MNKEKELRAAPSRLRHVQDLSSRWILQNNILTAAPRKEQTPVTITLLPCQYLDLTETN 60
 QY 105 KGSLLILGVSGEGLCYCDKQGSHPESLQKKEKMLAAQKESARRPFIFYRAQVGSR 164
 DB 61 RGDPTMGVQVPMSCFLCTKDGEQ--PVQLGEGNIMEMYNKBPVKAS-LFYHKSGTT 117
 QY 165 NMLESAAPHPGFI--CTSCNC 183
 DB 118 STFESAAPFGHFIACVSKGSC 138

RESULT 13

TI1F5 HUMAN
 ID TI1F5 HUMAN STANDARD; PRT; 155 AA.
 AC Q9UBH0;
 DT 28-FEB-2003 (Rel. 41, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Interleukin 1 family member 5 (IL-1F5) (Interleukin-1 delta) (IL-1
 DE delta) (F1L1 delta) (Interleukin-1-like protein 1) (IL-1L1)
 DE (Interleukin-1 HV1) (IL-1HV1) (Interleukin-1 receptor antagonist
 DE homolog 1) (IL-1ra homolog 1) (IL-1 related protein 3) (IL-1RP3)
 DE (UNQ1896/PRO342).
 GN Homo sapiens (Human).
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OC NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Placenta;
 RX MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
 RA Smith D.E., Renshaw B.R., Ketchum R.R., Rubin M., Garka K.E.,
 RA Sims J.E.;
 RT "Four new members expand the IL-1 superfamily.";
 RL J. Biol. Chem. 275:1169-1175(2000).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=fetal skin;
 RX MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;
 RA Mulero J.J., Pace A.M., Nelken S.T., Loeb D.B., Correa T.R.,
 RA Dmanac R., Ford J.E.;
 RT "IL1HV1: a novel interleukin-1 receptor antagonist gene.";
 RL Biochem. Biophys. Res. Commun. 263:702-706(1999).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Placenta;
 RX MEDLINE=20545212; PubMed=11093146;
 EX DOI=10.1002/1521-4141(200011)30:11<3299::AID-IMMU3299>3.0.CO;2-S;
 RA Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.H.;
 RA "A tissue specific IL-1 receptor antagonist homolog from the IL-1
 RT cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";
 RL Eur. J. Immunol. 30:3299-3308(2000).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21359532; PubMed=11466363;
 RA Debets R., Timans J.C., Homey B., Zurawski S., Sana T.R., Lo S.,
 RA Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
 RA Kastlein R.A.;
 RT "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
 RT as an antagonist and agonist of NF-kappa B activation through the
 RT orphan IL-1 receptor-related protein 2.";
 RL J. Immunol. 167:1440-1446(2001).
 RN [5]
 RP SEQUENCE FROM N.A.
 RC MEDLINE=20318623; PubMed=10606666; DOI=10.1006/geno.2000.6184;
 RX Rusfield S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
 RA Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
 RT "Identification and gene organization of three novel members of the
 RT IL-1 family on human chromosome 2.";
 RL Genomics 66:213-216(2000).
 RN [6]
 RP SEQUENCE FROM N.A.
 RC MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;
 RX Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J.,
 RA Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,
 RA Eaton D., Foster J., Grimaldi C., Gu Q., Hass P.E., Heldens S.,
 RA Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
 RA Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J.,
 RA Seehagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A.,
 RA Vandlen R., Watanabe C., Wieand D., Woods K., Xie M.-H., Yansura D.,
 RA Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.,
 RA Godowski P., Gray A.;
 RT "The secreted protein discovery initiative (SPDI), a large-scale
 RT effort to identify novel human secreted and transmembrane proteins: a
 RT bioinformatics assessment.";
 RL Genome Res. 13:2265-2270(2003).
 RN [7]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Placenta;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Klausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Scapleton M., Soares M.B., Bonaldo M.P., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udén T.B., Toshiyuki S., Carninci P., Frange C.,
 RA Raha S.A., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Buttefield Y.S.N., Krzywinski M.I., Skalska U., Smallos D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 CC -1- FUNCTION: Is a highly and a specific antagonist of the IL-1
 CC receptor-related protein 2-mediated response to interleukin 1
 CC family member 9 (IL1F9). Could constitute part of an independent
 CC signaling system analogous to interleukin-1 alpha (IL-1A), beta
 CC (IL-1B) receptor agonist and interleukin-1 receptor type I (IL-
 CC 1R1), that is present in epithelial barriers and takes part in
 CC local inflammatory response.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Predominantly expressed in keratinocytes but
 CC also in fibroblasts, endothelial cells or melanocytes. Detected
 CC also in the spleen, brain leukocyte and macrophage cell types.
 CC Increased in lesional psoriasis skin.
 CC -1- INDUCTION: By phorbol ester (PMA) and lypopolysaccharide (LPS)
 CC treatment in macrophage cell line.
 CC -1- SIMILARITY: Belongs to the IL-1 family.
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DR ENBL; AF201830; AAF25210.1; -
 DR ENBL; AF186094; AAF02757.1; -
 DR ENBL; AJ242737; CAB59822.1; -
 DR ENBL; AJ242738; CAB59823.1; -
 DR ENBL; AJ271338; CAB67704.1; -
 DR ENBL; AF216693; AAF76981.1; -
 DR ENBL; AF230377; AAF91274.1; -
 DR ENBL; AF359117; AAQ89475.1; -
 DR ENBL; BC024747; AAH24747.1; -
 DR PIR; JC7104; JC7104.
 DR HSP; P18510; IILR.
 DR Genew; HGNC:15561; IL1F5.
 DR MM; 605507; -
 DR GO; 0005152; F:interleukin-1 receptor antagonist activity; TAS.
 DR InterPro; IPR008996; Cytok IL1-like.
 DR InterPro; IPR000975; Interleukin_1.
 DR Pfam; PF00340; IL1; 1.
 DR PRINTS; PR00264; INTERLEUKIN1.
 DR ProDom; PD002536; Interleukin_1; 1.
 DR SMART; SM00125; IL1; 1.
 DR PROSITE; PS00253; INTERLEUKIN_1; 1.
 KW Cytokine; Multigene family.
 SQ SEQUENCE 155 AA; 16962 MW; B96DB5EFA2612E25 CRC64;

Query Match 14.28; Score 163.5; DB 1; Length 155;
 Best Local Similarity 32.98; Pred. No. 1.7e-06;
 Matches 50; Conservative 17; Mismatches 48; Indels 37; Gaps 6;
 QY 60 FSIHQDQKVLVDLSGNLIAPVDKQYIRPIFFALASSLSASAEKG----- 106
 Db 9 FRMKDSALKVLYLHNNQ-----LAGGLHAGKVIKGEELSVVPRWLDA 52
 QY 107 --SLILGVSGBFCLYCDKQGSFSLQKKEKLMKL-AAOKESARRPFIFYRAQVGS 163
 Db 53 SLSPVILGVGGGSQLSC--GVGQ-EPTLTLPVIMELYLGAKES--KSFTFVRDMGL 107
 QY 164 RNMLSAHQGFVICTSCNENPVGVTKPEN 195
 Db 108 TSGFESAAYFGVFLCTVPEADQPVRLQLPEN 139

RESULT 14
 Q7RTZ6 PRELIMINARY; PRT; 155 AA.
 AC Q7RTZ6
 DT 01-MAR-2004 (TrEMBLrel. 26, Created)
 DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
 DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
 DE IL-1F5 (IL-1H1, Flii-delta, IL-1RP3, IL-1L1, IL-1-delta).
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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 RX MEDLINE=20545212; PubMed=11093146;
 RX DOI=10.1302/1521-4141(2000)1130:113299;:AID-IMM03299>3.0.CO;2-S;
 RA Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.;
 RT "A tissue specific IL-1 receptor antagonist homolog from the IL-1
 RT cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";
 RL Eur. J. Immunol. 30:3299-3308(2000).
 RN [2]
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 RX MEDLINE=97312693; PubMed=9169134; DOI=10.1006/geno.1997.4654;
 RX Nothwang H.G., Strahm B., Denich D., Kuebler M., Schwabe J.,
 RA Gingrich J.C., Jauch A., Cox A., Nicklin M.J.H., Kurnit D.M.,
 RA Hildebrandt F.;

RT "Molecular cloning of the interleukin-1 gene cluster: construction of
 RT an integrated YAC/PAC contig and a partial transcriptional map in the
 RT region of chromosome 2q13.";
 RL Genomics 41:370-378(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=94245215; PubMed=8188271;
 RA Nicklin M.J.H., Weith A., Duff G.W.;
 RT "A Physical map of the region encompassing the human interleukin-1-
 RT alpha, interleukin-1-beta and interleukin-1 receptor genes.";
 RL Genomics 19:382-384(1994).
 RN [4]
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 RX MEDLINE=21988050; PubMed=11991722; DOI=10.1006/geno.2002.6751;
 RA Nicklin M.J.H., Barton J.L., Nguyen M., Fitzgerald M.G., Duff W.G.,
 RA Kornman K.;
 RT "A sequence-based map of the nine genes of the human interleukin-1
 RT cluster.";
 RL Genomics 79:718-725(2002).
 RN [5]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;
 RA Mulero J.J., Pace A.M., Nelken S.T., Loeb D.D., Correa T.R.,
 RA Drmanac R., Ford J.E.;
 RT "TL1HY1: A novel interleukin-1 receptor antagonist gene.";
 RL Biochem. Biophys. Res. Commun. 263:702-706(1999).
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
 RA Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M., Garka K.E.,
 RA Sims J.E.;
 RT "Four new members expand the interleukin-1 superfamily.";
 RL J. Biol. Chem. 275:1169-1175(2000).
 RN [7]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
 RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
 RA Griswold D.B., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
 RA Young P.R.;
 RT "Identification and initial characterization of four novel members of
 RT the interleukin-1 family.";
 RL J. Biol. Chem. 275:10308-10314(2000).
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 RX MEDLINE=20318623; PubMed=10860666; DOI=10.1006/geno.2000.6184;
 RA Busfield S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
 RA Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
 RT "Identification and gene organization of three novel members of the
 RT IL-1 family on human chromosome 2.";
 RL Genomics 66:213-216(2000).
 RN [9]
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 RX MEDLINE=21066552; PubMed=11145836; DOI=10.1006/cyto.2000.0799;
 RA Pan G., Rissler P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
 RA Yansura D., Lewis L., Eigenbrot C., Henzel W.J., Vandlen R.;
 RT "IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
 RT 1Rrp.";
 RL Cytokine 13:1-7(2001).
 RN [10]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21282953; PubMed=11278614; DOI=10.1074/jbc.M010095200;
 RA Lin H.S., Ho A.S., Haley-Vicente D., Zhang J., Bernal-Fussel J.,
 RA Pace A.M., Hansen D., Schweighofer K., Mize N.K., Ford J.E.;
 RT "Cloning and characterization of IL-1HY2, a novel interleukin-1 family
 RT member.";
 RL J. Biol. Chem. 276:20597-20602(2001).
 RN [11]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21359532; PubMed=11466363;
 RA Debets R., Timans J.C., Homey B., Zurawski S., Sana T.R., Lo S.,
 RA Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
 RA Kastelein R.A.;
 RT "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function

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GenCore version 5.1.6
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766.909 Million cell updates/sec

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Gapop 10.0 , Gapext 0.5

Searched: 1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
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Listing first 45 summaries

Database : Published Applications AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	1130	97.8	218	14	US-10-139-833-12
5	1130	97.8	218	14	US-10-302-554-2
6	1126	97.5	218	14	US-10-302-554-14
7	1121	97.1	218	10	US-09-876-790-8
8	1121	97.1	218	16	US-10-888-918-8
9	1121	97.1	218	17	US-10-888-867-8
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					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 12, Appl
					Sequence 2, Appli
					Sequence 14, Appl
					Sequence 8, Appli
					Sequence 8, Appli
					Sequence 8, Appli
					Sequence 8, Appli

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17	1022	88.5	198	9	US-09-788-963-6	Sequence 6, Appli
18	1010	87.4	218	14	US-10-302-554-7	Sequence 7, Appli
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ALIGNMENTS

RESULT 1
US-10-695-195-2
; Sequence 2, Application US/10695195
; Publication No. US20040068099A1
; GENERAL INFORMATION:
; APPLICANT: Timans, Jacqueline C.
; TITLE OF INVENTION: Mammalian Cytokines; Related Reagents and Methods
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/695,195
; FILING DATE: 27-Oct-2003
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/398,412
; FILING DATE: 17-Sep-1999
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0904K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650)852-9196
; TELEFAX: (650)496-1200

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; INFORMATION FOR SEQ ID NO: 2:
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; MOLECULE TYPE: protein
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; Publication No. US20040087766A1
; GENERAL INFORMATION:
; APPLICANT: Timans, Jacqueline C.
; TITLE OF INVENTION: Mammalian Cytokines; Related Reagents and Methods
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104

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; FILING DATE: 27-Oct-2003
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; APPLICATION NUMBER: US/09/398,412
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; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0904K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 852-9196
; TELEFAX: (650) 496-1200
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RESULT 3
US-09-788-963-2
; Sequence 2, Application US/09788963
; Patent No. US20020052473A1
; GENERAL INFORMATION:
; APPLICANT: YOUNG, PETER R.
; APPLICANT: MCDONNELL, PETER C.
; APPLICANT: KUMAR, SANJAY
; TITLE OF INVENTION: INTERLEUKIN-1 HOMOLOGUE, MAT IL-1H4
; FILE REFERENCE: GP-70607-1C1
; CURRENT APPLICATION NUMBER: US/09/788,963
; CURRENT FILING DATE: 2001-02-20
; PRIOR APPLICATION NUMBER: 09/293,625
; PRIOR FILING DATE: 1999-04-16
; PRIOR APPLICATION NUMBER: 09/452,140
; PRIOR FILING DATE: 1999-12-01
; NUMBER OF SEQ ID NOS: 6
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US-09-788-963-2

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; Sequence 12, Application US/10139833
; Publication No. US2003004106A1
; GENERAL INFORMATION:
; APPLICANT: Saria, Christiaan M.
; APPLICANT: Giles, Jennifer


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; APPLICANT: Mu, Sharon X.
; APPLICANT: Xia, Min
; APPLICANT: Baas, Michael B.
; APPLICANT: Craveiro, Roger
; TITLE OF INVENTION: Interleukin-1 Receptor Antagonist-Related Molecules and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: 00-1213-E
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; PRIOR FILING DATE: 2000-04-04
; PRIOR APPLICATION NUMBER: 60/195,910
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; Publication No. US20030148467A1
; GENERAL INFORMATION:
; APPLICANT: West, Robert R.
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: INTERLEUKIN-1 HOMOLOG ZIL1A4
; FILE REFERENCE: 98-59
; CURRENT APPLICATION NUMBER: US/10/302,554
; CURRENT FILING DATE: 2002-11-22
; PRIOR APPLICATION NUMBER: US/09/428,118
; PRIOR FILING DATE: 1999-10-27
; PRIOR APPLICATION NUMBER: US 60/105,824
; PRIOR FILING DATE: 1998-10-27
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-302-554-2

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Query Match 97.8%; Score 1130; DB 14; Length 218;

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Best Local Similarity 98.2%; Pred. No. 4.3e-112;
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; Publication No. US20030148467A1
; GENERAL INFORMATION:
; APPLICANT: West, Robert R.
; APPLICANT: Sheppard, Paul O.
; APPLICANT: Gao, Zeren
; TITLE OF INVENTION: INTERLEUKIN-1 HOMOLOG ZIL1A4
; FILE REFERENCE: 98-59
; CURRENT APPLICATION NUMBER: US/10/302,554
; CURRENT FILING DATE: 2002-11-22
; PRIOR APPLICATION NUMBER: US/09/428,118
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US-10-302-554-14

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Query Match          97.5%; Score 1126; DB 14; Length 218;
Best Local Similarity 97.7%; Pred. No. 1.2e-111;
Matches 213; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy      1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAAGSPLEPGSLPTMNFVHTSRKVKSLNPKKF 60
Db      1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAAGSPLEPGSLPTMNFVHTSRKVKSLNPKKF 60

Qy      61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEKSGSLILGLVSKGEFCL 120
Db      61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEKSGSLILGLVSKGEFCL 120

Qy      121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFRYAQVGSNNMLESAAHPGWFICTS 180
Db      121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFRYAQVGSNNMLESAAHPGWFICTS 180

Qy      181 CNCNEPVGVTDKFENRKHIEFSFPVCKAEMSPSEVSD 218
Db      181 CNCNEPVGVTDKFENRKHIEFSFPVCKAEMSPSEVSD 218

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RESULT 7

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US-03-876-790-8
; Sequence 8, Application US/09876790
; Publication No. US20030091532A1
; GENERAL INFORMATION:
; APPLICANT: SIMS, John E.

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; APPLICANT: SMITH, Dirk E.
; APPLICANT: BORN, Teresa L.
; FILE OF INVENTION: IL-1 ZETA, IL-1 ZETA SPLICE VARIANTS AND XREC2 DNAS AND POLYPEPTI
; FILE REFERENCE: 2008-US
; CURRENT APPLICATION NUMBER: US/09/876,790
; CURRENT FILING DATE: 2002-09-04
; PRIOR APPLICATION NUMBER: 60/112,163
; PRIOR FILING DATE: 1998-12-14
; PRIOR APPLICATION NUMBER: 60/146,675
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: PCT/US99/29549
; PRIOR FILING DATE: 1999-12-14
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-876-790-8

Query Match          97.1%; Score 1121; DB 10; Length 218;
Best Local Similarity 97.7%; Pred. No. 4e-111;
Matches 213; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
DB 1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSPKVKNLNPKKF 60

QY 61 SHDQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILLGVSKGEFCL 120
DB 61 SHDQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120

QY 121 YCDKDKGQSHPSQLKKEKLMKLAQAQESARRPFIYRAQVGSRRNLMLESAAHFGWFICT 180
DB 121 YCDKDKGQSHPSQLKKEKLMKLAQAQESARRPFIYRAQVGSRRNLMLESAAHFGWFICT 180

QY 181 CNCNEPVGVTDKPENRKHIEFSPQVCKAEMSPSEVSD 218
DB 181 CNCNEPVGVTDKPENRKHIEFSPQVCKAEMSPSEVSD 218

; RESULT 9
US-10-888-867-8
; Sequence 8, Application US/1088867
; Publication No. US20050009075A1
; GENERAL INFORMATION:
; APPLICANT: SMITH, Dirk E.
; APPLICANT: BORN, Teresa L.
; TITLE OF INVENTION: IL-1 ZETA, IL-1 ZETA SPLICE VARIANTS AND XREC2 DNAS AND POLYPEPT
; FILE REFERENCE: 2008-US
; CURRENT APPLICATION NUMBER: US/10/888,867
; CURRENT FILING DATE: 2004-07-09
; PRIOR APPLICATION NUMBER: US/09/876,790
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/112,163
; PRIOR FILING DATE: 1998-12-14
; PRIOR APPLICATION NUMBER: 60/146,675
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: PCT/US99/29549
; PRIOR FILING DATE: 1999-12-14
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-888-867-8

Query Match          97.1%; Score 1121; DB 17; Length 218;
Best Local Similarity 97.7%; Pred. No. 4e-111;
Matches 213; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
DB 1 MSFVGENSGVKGSEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSPKVKNLNPKKF 60

QY 61 SHDQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILLGVSKGEFCL 120
DB 61 SHDQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120

QY 121 YCDKDKGQSHPSQLKKEKLMKLAQAQESARRPFIYRAQVGSRRNLMLESAAHFGWFICT 180
DB 121 YCDKDKGQSHPSQLKKEKLMKLAQAQESARRPFIYRAQVGSRRNLMLESAAHFGWFICT 180

QY 181 CNCNEPVGVTDKPENRKHIEFSPQVCKAEMSPSEVSD 218
DB 181 CNCNEPVGVTDKPENRKHIEFSPQVCKAEMSPSEVSD 218

; RESULT 10
US-10-888-779-8
; Sequence 8, Application US/10888779
; Publication No. US20050009138A1
; GENERAL INFORMATION:
; APPLICANT: SMITH, Dirk E.
; APPLICANT: BORN, Teresa L.
; FILE OF INVENTION: IL-1 ZETA, IL-1 ZETA SPLICE VARIANTS AND XREC2 DNAS AND POLYPEPTI
; FILE REFERENCE: 2008-US
; CURRENT APPLICATION NUMBER: US/10/888,918
; CURRENT FILING DATE: 2004-07-09
; PRIOR APPLICATION NUMBER: US/09/876,790
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/112,163
; PRIOR FILING DATE: 1998-12-14
; PRIOR APPLICATION NUMBER: 60/146,675
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: PCT/US99/29549
; PRIOR FILING DATE: 1999-12-14
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-888-918-8

Query Match          97.1%; Score 1121; DB 16; Length 218;
Best Local Similarity 97.7%; Pred. No. 4e-111;
Matches 213; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

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; APPLICANT: BORN, Teresa L.
; TITLE OF INVENTION: IL-1 ZETA, IL-1 ZETA SPICE VARIANTS AND XREC2 DNAS AND POLYPEPTI
; FILE REFERENCE: 2008-US
; CURRENT APPLICATION NUMBER: US/10/888,779
; PRIOR FILING DATE: 2004-07-09
; PRIOR APPLICATION NUMBER: US/09/876,790
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/112,163
; PRIOR FILING DATE: 1998-12-14
; PRIOR APPLICATION NUMBER: 60/146,675
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: PCT/US99/29549
; PRIOR FILING DATE: 1999-12-14
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-888-779-8

Query Match          97.1%; Score 1121; DB 17; Length 218;
Best Local Similarity 97.7%; Pred. No. 4e-111;
Matches 213; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

Qy 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
Db 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60

Qy 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILGVSKGEFCL 120
Db 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120

Qy 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180
Db 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180

Qy 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218

RESULT 11
US-10-888-780-8
; Sequence 8, Application US/10888780
; Publication No. US20050013797A1
; GENERAL INFORMATION:
; APPLICANT: SIMS, John E.
; APPLICANT: SMITH, Dirk E.
; TITLE OF INVENTION: IL-1 ZETA, IL-1 ZETA SPICE VARIANTS AND XREC2 DNAS AND POLYPEPTI
; FILE REFERENCE: 2008-US
; CURRENT APPLICATION NUMBER: US/10/888,780
; PRIOR FILING DATE: 2004-07-09
; PRIOR APPLICATION NUMBER: US/09/876,790
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/112,163
; PRIOR FILING DATE: 1998-12-14
; PRIOR APPLICATION NUMBER: 60/146,675
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: PCT/US99/29549
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-888-780-8

Query Match          97.1%; Score 1121; DB 17; Length 218;
Best Local Similarity 97.7%; Pred. No. 4e-111;
Matches 213; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

Qy 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
Db 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60

Qy 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILGVSKGEFCL 120
Db 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120

Qy 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180
Db 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180

Qy 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218

RESULT 12
US-10-888-931-8
; Sequence 8, Application US/10888931
; Publication No. US20050013798A1
; GENERAL INFORMATION:
; APPLICANT: SIMS, John E.
; APPLICANT: SMITH, Dirk E.
; TITLE OF INVENTION: IL-1 ZETA, IL-1 ZETA SPICE VARIANTS AND XREC2 DNAS AND POLYPEPTI
; FILE REFERENCE: 2008-US
; CURRENT APPLICATION NUMBER: US/10/888,931
; CURRENT FILING DATE: 2004-07-09
; PRIOR APPLICATION NUMBER: US/09/876,790
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/112,163
; PRIOR FILING DATE: 1998-12-14
; PRIOR APPLICATION NUMBER: 60/146,675
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: PCT/US99/29549
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-888-931-8

Query Match          97.1%; Score 1121; DB 17; Length 218;
Best Local Similarity 97.7%; Pred. No. 4e-111;
Matches 213; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

Qy 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
Db 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60

Qy 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILGVSKGEFCL 120
Db 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120

Qy 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180
Db 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180

Qy 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218

RESULT 13
US-10-695-195-4
; Sequence 4, Application US/10695195
; Publication No. US20040068099A1
; GENERAL INFORMATION:
; APPLICANT: Timans, Jacqueline C.
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Qy 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
Db 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60

Qy 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILGVSKGEFCL 120
Db 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120

Qy 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180
Db 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180

Qy 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218

RESULT 12
US-10-888-931-8
; Sequence 8, Application US/10888931
; Publication No. US20050013798A1
; GENERAL INFORMATION:
; APPLICANT: SIMS, John E.
; APPLICANT: SMITH, Dirk E.
; TITLE OF INVENTION: IL-1 ZETA, IL-1 ZETA SPICE VARIANTS AND XREC2 DNAS AND POLYPEPTI
; FILE REFERENCE: 2008-US
; CURRENT APPLICATION NUMBER: US/10/888,931
; CURRENT FILING DATE: 2004-07-09
; PRIOR APPLICATION NUMBER: US/09/876,790
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/112,163
; PRIOR FILING DATE: 1998-12-14
; PRIOR APPLICATION NUMBER: 60/146,675
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: PCT/US99/29549
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-888-931-8

Query Match          97.1%; Score 1121; DB 17; Length 218;
Best Local Similarity 97.7%; Pred. No. 4e-111;
Matches 213; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

Qy 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
Db 1 MSFVGENSGVKGSGEDWEKDEPOCCLEDPAVSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60

Qy 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSLILGVSKGEFCL 120
Db 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120

Qy 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180
Db 121 YCDKDKGQSHPSLQKKEKLMKLAQAQESARRPFIFYRAQVGSNNMLESAAHPGWFICTS 180

Qy 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSFQPVCKAEMSPSEVSD 218

RESULT 13
US-10-695-195-4
; Sequence 4, Application US/10695195
; Publication No. US20040068099A1
; GENERAL INFORMATION:
; APPLICANT: Timans, Jacqueline C.
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; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/694,978
; FILING DATE: 27-Oct-2003
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/398,412
; FILING DATE: 17-Sep-1999
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0904K
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650)852-9196
; TELEFAX: (650)496-1200
; LENGTH: 218 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
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; US-10-694-978-4
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; Query Match 96.6%; Score 1116; DB 15; Length 218;
; Best Local Similarity 97.4%; Pred. No. 1.4e-110;
; Matches 212; Conservative 1; Mismatches 5; Indels 0; Gaps 0;
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; QY 1 MSFVGENSGVKMGSEDEWDEKDEPOCCLEDPAGSPLEPGPSLPTMNFVHTSRKVKSLNPKKF 60
; DB 1 MSFVGENSGVKMGSEDEWDEKDEPOCCLEDPAGSPLEPGPSLPTMNFVHTSPKVKNLNPKKF 60
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; QY 61 SIHQDQHKVLVDGSLNLIIVDPDKNYIRPEIFFALASSLSASAEKGSLLILGVSKGEFCL 120
; DB 61 SIHQDQHKVLVDGSLNLIIVDPDKNYIRPEIFFALASSLSASAEKGSPIILGVSKGEFCL 120
;
; QY 121 YCDKDGQSHPSLOLKEKLMKLAOKESARRPFIFVRAQVGSNNMLESAAHPGWFICTS 180
; DB 121 YCDKDGQSHPSLOLKEKLMKLAOKESARRPFIFVRAQVGSNNMLESAAHPGWFICTS 180
;
; QY 181 CNCNEPVGVTDKPENRKHIEFSFPVKCAEMSPSEVSD 218
; DB 181 CNCNEPVGVTDKPENRKHIEFSFPVKCAEMSPSEVSD 218
;
; RESULT 15
; US-10-679-201-6
; Sequence 6, Application US/10679201
; Publication No. US20040120923A1
; GENERAL INFORMATION:
; APPLICANT: DINARELLO, CHARLES A.
; APPLICANT: KIM, SOO-HYUN
; APPLICANT: BUFLER, PHILIP
; TITLE OF INVENTION: METHOD OF TREATMENT USING A CYTOKINE ABLE TO BIND
; FILE REFERENCE: IL-18BP TO INHIBIT THE ACTIVITY OF A SECOND CYTOKINE
; CURRENT APPLICATION NUMBER: US/10/679,201
; CURRENT FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,827
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 6
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Homo sapiens
;
; US-10-679-201-6
;
; Query Match 96.6%; Score 1116; DB 16; Length 218;

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GenCore version 5.1.6
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OM protein - protein search, using sw model

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(without alignments)
1287.233 Million cell updates/sec

Title: US-10-695-195-4

Perfect score: 1165

Sequence: 1 MSFVGSEGVKMGSEWDEK.....IERSFPQVCKAEMSPSEVSD 218

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A.Geneseq_16Dec04:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	1165	100.0	218	4 AAB47186	Aab47186 IL-1 rela
3	1165	100.0	218	4 AAG68116	Aag68116 Human int
4	1165	100.0	218	8 ADJ88306	Adj88306 Human int
5	1165	100.0	218	8 ADL15868	Adl15868 Human int
6	1165	100.0	218	8 ADN41836	Adn41836 Amino aci
7	1165	100.0	218	8 ADO04679	Ado04679 Human int
8	1161	99.7	218	3 AAY95299	Aay95299 Human int
9	1154	99.1	218	3 AAY70927	Aay70927 Human zil
10	1154	99.1	218	3 AAY96940	Aay96940 Human zil
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12	1154	99.1	218	4 AAB85136	Aab85136 Interleuk
13	1154	99.1	218	8 ADN05012	Adn05012 Antipsori
14	1151	98.8	218	3 AAY71084	Aay71084 Human zil
15	1151	98.8	218	7 ADH89067	Adh89067 Human zil
16	1150	98.7	218	3 AAY70933	Aay70933 Human zil
17	1150	98.7	218	7 ADH89075	Adh89075 Human zil
18	1138	97.7	218	3 AAY70931	Aay70931 Human zil
19	1138	97.7	218	7 ADH89072	Adh89072 Human zil
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21	1116	95.8	218	8 ADJ88304	Adj88304 Human int
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23	1116	95.8	218	8 ADO04677	Ado04677 Human int
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25	1046	89.8	198	4 AAB85138	Aab85138 Interleuk

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27	1034	88.8	218	7 ADH89068	Adh89068 Human zil
28	1026.5	88.1	197	3 AAY95300	Aay95300 Human int
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30	919	78.9	176	8 ADL66905	Adl66905 Human ext
31	909	78.0	178	2 AAW93057	Aaw93057 Human Tan
32	895	76.8	192	3 AAY95297	Aay95297 Human int
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34	895	76.8	203	3 AAY96933	Aay96933 Human IL-
35	885.5	76.0	193	3 AAY96934	Aay96934 Processed
36	885.5	76.0	193	4 AAB87596	Aab87596 Human PRO
37	885.5	76.0	193	5 ABG95921	Abg95921 Human sec
38	885.5	76.0	193	6 ABU90946	Abu90946 Novel hum
39	885.5	76.0	193	6 ABO34005	Abu34005 Human sec
40	885.5	76.0	193	6 ABU72022	Abu72022 Novel hum
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43	885.5	76.0	193	6 ABO27351	Abu27351 Human sec
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ALIGNMENTS

RESULT 1

AAY91885
ID AAY91885 standard; protein; 218 AA.

XX AAY91885;

XX AC

XX 19-JUL-2000 (first entry)

XX Primate interleukin-1 like molecule (IL-1-zeta) alternative sequence.
XX Primate; interleukin-1 like; IL-1-zeta; systemic inflammation; fever;
XX hypoglycemia; plasma iron; plasma zinc; acute liver response;
XX plasma copper.

XX Mammalia.

Key	Location/Qualifiers
FT Domain	58..64
FT Domain	/label= beta_strand_1
FT Domain	69..74
FT Domain	/label= beta_strand_2
FT Domain	76..80
FT Domain	/label= beta_strand_3
FT Domain	91..96
FT Domain	/label= beta_strand_4
FT Binding-site	100..106
FT	/note= "forms a loop which is part of a primary binding segment to the IL-1 receptor type"
FT Domain	107..113
FT Domain	/label= beta_strand_5
FT Domain	118..126
FT Domain	/label= beta_strand_6
FT Domain	131..136
FT Domain	/label= beta_strand_7
FT Domain	154..161
FT Domain	/label= beta_strand_8
FT Domain	163..169
FT Domain	/label= beta_strand_9
FT Domain	176..180
FT Domain	/label= beta_strand_10
FT Domain	185..204
FT Domain	/label= beta_strand_11
FT Domain	201..204
FT Domain	/label= beta_strand_12
XX	WO200017363-A2.
XX	30-MAR-2000.
PD	

XX 17-SEP-1999; 99WO-US020868.
 XX 18-SEP-1998; 98US-00156966.
 XX (SCHE) SCHERING CORP.
 XX Timans JC;
 XX WPI: 2000-283588/24.
 XX N-PSDB; AAA08513.
 XX New mammalian interleukin 1 like molecule, designated IL-1-zeta, useful
 PT for diagnostic and therapeutic purposes, comprises a 128 amino acid
 PT sequence.
 XX Claim 1; Page 103-104; 110pp; English.
 XX The present sequence is an alternative primate interleukin-1 like
 CC molecule, designated IL-1-zeta. The 12 beta strands, indicated in the
 CC features table, fold into a beta-trefoil fold. The specification claims
 CC an isolated or recombinant polypeptide that: (a) specifically binds
 CC polyclonal antibodies generated against at least a 12 consecutive amino
 CC acid segment of IL-1-zeta (see AA91884) or its allelic variant (see
 CC AA91885); and (b) comprises at least one sequence selected from:
 CC AA91886-903 or AA91904-96. The preferred 12 consecutive amino acid
 CC segment is chosen from AA91907-18 or AA91919-21. IL-1-zeta is likely to
 CC play a role in systemic inflammatory reactions, such as fever,
 CC hypoglycemia, reduced plasma iron and zinc, the acute response of the
 CC liver, and increase plasma copper. IL-1-zeta binding compounds
 CC (comprising antigen binding sites) and IL-1-zeta polypeptides are also
 CC useful for both diagnostic and therapeutic purposes
 XX Sequence 218 AA;
 SQ
 Query Match 100.0%; Score 1165; DB 3; Length 218;
 Best Local Similarity 100.0%; Pred. No. 1.9e-117;
 Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKMGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 DB 1 MSFVGENSGVKMGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 QY 61 SIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120
 DB 61 SIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120
 QY 121 YCDKDKGQSHPSLQKKELKMLAAOKESARRPFIFYRAQVGSWNMLESAAHPGWFICTS 180
 DB 121 YCDKDKGQSHPSLQKKELKMLAAOKESARRPFIFYRAQVGSWNMLESAAHPGWFICTS 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 RESULT 2
 AAB47186
 ID AAB47186 standard; protein; 218 AA.
 AC AAB47186;
 DT 29-JUN-2001 (first entry)
 DE IL-1 related polypeptide.
 XX Interleukin-1-related polypeptide; HPB-MLT cell; T-cell; inhibition;
 XX natural killer activity; immune system; gene therapy; immunodeficiency.
 XX Homo sapiens.
 XX EP1092773-A2.
 XX

PD 18-APR-2001.
 XX 11-OCT-2000; 2000EP-00308948.
 XX 15-OCT-1999; 99JP-00294493.
 XX (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
 XX Ushio S, Nukada Y, Yamamoto K, Kurimoto M;
 XX WPI: 2001-275206/29.
 XX N-PSDB; AAC65680.
 XX New human interleukin-1-related polypeptide and polynucleotide, useful
 PT for gene therapy and in developing drugs as regulators of natural killer
 PT activity, are capable of inhibiting natural killer activity.
 XX Claim 1; Page 12; 15pp; English.
 XX This sequence represents an interleukin-1 (IL-1)-related polypeptide. IL-
 CC 1 related polypeptide was isolated from HPB-MLT cells, FERM-BP-2430, an
 CC established human T-cell line. IL-1 related polypeptide is useful for
 CC inhibiting natural killer (NK) activity, which is related to the immune
 CC system of mammals. The DNA encoding the IL-1 related polypeptide is
 CC useful in gene therapy of patients in need of NK activity inhibition and
 CC others suffering from immunodeficiency
 XX Sequence 218 AA;
 SQ
 Query Match 100.0%; Score 1165; DB 4; Length 218;
 Best Local Similarity 100.0%; Pred. No. 1.9e-117;
 Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKMGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 DB 1 MSFVGENSGVKMGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 QY 61 SIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120
 DB 61 SIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120
 QY 121 YCDKDKGQSHPSLQKKELKMLAAOKESARRPFIFYRAQVGSWNMLESAAHPGWFICTS 180
 DB 121 YCDKDKGQSHPSLQKKELKMLAAOKESARRPFIFYRAQVGSWNMLESAAHPGWFICTS 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 RESULT 3
 AAG68116
 ID AAG68116 standard; protein; 218 AA.
 AC AAG68116;
 DT 22-JAN-2002 (first entry)
 DE Human interleukin 1 family protein SEQ ID NO:2.
 XX Human; interleukin 1; IL-1; growth factor; Tango-77; diagnosis;
 XX identification.
 XX Homo sapiens.
 XX JP2001231578-A.
 XX 28-AUG-2001.
 XX 07-DEC-2000; 2000JP-00372864.
 XX 09-DEC-1999; 99JP-00349780.
 XX

PA (KYOW) KYOWA HAKKO KOGYO KK.
XX WPI; 2001-609968/70.
DR N-PSDB; AAJ171179.
XX
XX An IL-1 family protein, used for the development of diagnostic and
PT treatment agents.
XX
XX Claim 1; Page 30; 38pp; Japanese.
XX
XX The present sequence represents a human interleukin 1 (IL-1) family
CC protein having a combining affinity to a receptor of a protein of human
CC IL-1 family higher than Tango-77. The protein is useful for the
CC development of diagnostic, treating and/or preventive agents for various
CC diseases
XX
XX Sequence 218 AA;
SQ
Query Match 100.0%; Score 1165; DB 4; Length 218;
Best Local Similarity 100.0%; Pred. No. 1.9e-117;
Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MSFVGENSGVKGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVKNLNPKKF 60
Db 1 MSFVGENSGVKGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVKNLNPKKF 60
Qy 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIPFALASSLSASAEKGSPIILGVSKGFCL 120
Db 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIPFALASSLSASAEKGSPIILGVSKGFCL 120
Qy 121 YCDKDKGQSHPSLQKKKELMKLAQKESARRPFIFYRAQVGSWNMLESAHPGWFICT 180
Db 121 YCDKDKGQSHPSLQKKKELMKLAQKESARRPFIFYRAQVGSWNMLESAHPGWFICT 180
Qy 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
RESULT 4
ADJ88306
ID ADJ88306 standard; protein; 218 AA.
XX
AC ADJ88306;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human interleukin-1zeta protein variant.
XX
KW Interleukin-1zeta; gene therapy; immune system; haematopoietic cell;
KW inflammatory disorder; infection; allergy; cancer; human.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Region 30..41
FT /note= "Epitope"
FT Region 45..50
FT /note= "Epitope"
FT Region 46..60
FT /note= "Epitope"
FT Region 107..113
FT /note= "Epitope"
FT Region 156..167
FT /note= "Epitope"
FT Region 163..169
FT /note= "Epitope"
XX
PN US6680380-B1.
XX
PD 20-JAN-2004.
XX
XX 17-SEP-1999; 99US-00398412.

XX 18-SEP-1998; 98US-0100948P.
XX
XX (SCHE) SCHERING CORP.
XX
XX Timans JC;
XX
XX WPI; 2004-189656/18.
DR N-PSDB; ADJ88305.
XX
XX New nucleic acid molecules encoding mammalian interleukin-1 polypeptides,
PT useful for diagnosing, preventing or treating diseases associated with
PT abnormal expression of interleukin, e.g. inflammation, infection or
PT cancer.
XX
XX Claim 2; SEQ ID NO 4; 36pp; English.
XX
XX The invention relates to an isolated or recombinant nucleic acid encoding
CC interleukin-1zeta polypeptide. The invention is useful in gene therapy.
CC The composition and methods are useful in diagnosing or treating
CC degenerative or abnormal conditions which directly or indirectly involve
CC development, differentiation or function, e.g. of the immune system
CC and/or haematopoietic cells. The invention may also be used for
CC preventing or treating other diseases or disorders associated with
CC abnormal expression or triggering of response to the interleukin, such as
CC inflammatory disorders, infection, allergies or cancer. The present
CC sequence is human interleukin-1zeta variant.
XX
XX Sequence 218 AA;
SQ
Query Match 100.0%; Score 1165; DB 8; Length 218;
Best Local Similarity 100.0%; Pred. No. 1.9e-117;
Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MSFVGENSGVKGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVKNLNPKKF 60
Db 1 MSFVGENSGVKGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVKNLNPKKF 60
Qy 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIPFALASSLSASAEKGSPIILGVSKGFCL 120
Db 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIPFALASSLSASAEKGSPIILGVSKGFCL 120
Qy 121 YCDKDKGQSHPSLQKKKELMKLAQKESARRPFIFYRAQVGSWNMLESAHPGWFICT 180
Db 121 YCDKDKGQSHPSLQKKKELMKLAQKESARRPFIFYRAQVGSWNMLESAHPGWFICT 180
Qy 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
RESULT 5
ADL15868
ID ADL15868 standard; protein; 218 AA.
XX
AC ADL15868;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human interleukin 1 zeta (IL-1zeta) seqid 4.
XX
KW anti-inflammatory; interleukin 1 zeta; IL-1 zeta; immunogen;
KW antisera production; antibody production; anti-inflammatory; human.
XX
OS Homo sapiens.
XX
PN US2004068099-A1.
XX
PD 08-APR-2004.
XX
PF 27-OCT-2003; 2003US-00695195.
XX
XX 18-SEP-1998; 98US-0100948P.

PR 17-SEP-1999; 99US-00398412.
 XX (TIMA/) TIMANS J C.
 XX TIMANS JC;
 XX WPI; 2004-304623/28.
 DR N-PSDB; ADL15867.
 XX Novel isolated or recombinant interleukin 1 zeta polypeptide useful as
 PT immunogen for producing specific antibodies or for developing anti-
 PT inflammatory therapeutics.
 XX Claim 1; SEQ ID NO 4; 42pp; English.
 XX The invention describes an isolated or recombinant interleukin 1 zeta
 CC polypeptide (I) that specifically binds to polyclonal antibodies
 CC generated against at least a 12 consecutive amino acid segment of two
 CC fully defined sequences (S1) and (S2) having 218 amino acids as given in
 CC the specification and comprises at least one sequence chosen from (S1)
 CC and (S2). Also described are: a fusion protein comprising (I) or its
 CC sequences, a detection or purification tag, including FLAG, His6 or Ig
 CC sequence or sequence of another cytokine or chemokine; a binding compound
 CC (II) an antigen binding site from an antibody, which specifically binds
 CC to (I); a composition of matter comprising a sterile polypeptide (I) or
 CC (II), (I) or (II) and a carrier such as an aqueous compound e.g., water,
 CC saline and/or buffer, where the carrier is formulated for oral, rectal,
 CC nasal, topical or parental administration; an isolated or recombinant
 CC nucleic acid (III) that encodes (I) or several antigenic peptides of (S1)
 CC or (S2); a cell (IV) transformed with (III); a method of modulating a
 CC cell involved in an inflammatory response, by contacting the cell with an
 CC agonist or antagonist of (I); a kit comprising a compartment of (I), (II)
 CC or (III) and/or instructions for use or disposal of reagents in the kit;
 CC and producing an antibody as mentioned in (II) or an antigen:antibody
 CC complex. (I) is useful as immunogen for producing antisera or specific
 CC antibodies or useful for developing more effective anti-inflammatory
 CC therapeutics. This is the amino acid sequence of a human interleukin 1
 CC zeta polypeptide.
 XX Sequence 218 AA;
 SQ
 Query Match 100.0%; Score 1165; DB 8; Length 218;
 Best Local Similarity 100.0%; Pred. No. 1.9e-117;
 Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSEDWEKDEPQCCLDPVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 DB 1 MSFVGENSGVKGSEDWEKDEPQCCLDPVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 QY 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEKSGSPILLGVSGKEFCL 120
 DB 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEKSGSPILLGVSGKEFCL 120
 QY 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIYFRAQVGSWNMLESAHPGWICTS 180
 DB 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIYFRAQVGSWNMLESAHPGWICTS 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 RESULT 6
 ADN41836
 ID ADN41836 standard; protein; 218 AA.
 AC ADN41836;
 XX 15-JUL-2004 (first entry)
 DT Amino acid sequence of human IL-1F7b.
 DE cytokine-1; interleukin-188P; IL-18BP; cytokine-2; IL-1; IL-1F7b; IL-18R;
 XX

KW inflammatory disease; endotoxin lethality; sepsis; liver injury;
 KW hepatitis C; arthritis; lung injury; psoriasis;
 KW inflammatory bowel disease; brain injury; ischaemic injury;
 KW cardiac dysfunction; neuritis; metastasis.
 XX Homo sapiens.
 XX WO2004032837-A2.
 XX 22-APR-2004.
 XX 03-OCT-2003; 2003WO-US031378.
 XX 08-OCT-2002; 2002US-0416927P.
 XX (ARES-) ARES TRADING SA.
 XX Dinarello CA, Kim S, Bufler P;
 XX WPI; 2004-340785/31.
 XX Use of a cytokine-1, its isoform, mutein or fused protein, capable of
 PT binding to IL-18BP and inhibiting a receptor of a cytokine-2 that is a
 PT member of the IL-1 family, useful for treating or preventing inflammatory
 PT diseases.
 XX Disclosure; Fig 1; 57pp; English.
 XX The specification describes a method for using a cytokine-1 capable of
 CC binding to interleukin (IL)-18BP and capable of inhibiting a receptor of a
 CC cytokine-2 that is a member of the IL-1 family, in the manufacture of a
 CC medicament for the treatment or prevention of a disease which is caused
 CC or aggravated by inducing the receptor of cytokine-2. The cytokine-1 is
 CC preferably IL-1F7b. The receptor of cytokine-2 is IL-18R. The method is
 CC useful for the treatment or prevention of inflammatory diseases, selected
 CC from endotoxin lethality (sepsis), liver injury induced by toxins or
 CC activated T cells or hepatitis C, arthritis, lung injury, psoriasis,
 CC inflammatory bowel disease; brain injury, ischaemic injury, cardiac
 CC dysfunction, and neuritis, and for preventing metastasis formation. The
 CC present sequence represents human IL-1F7b, which is used in the method of
 CC the invention.
 XX Sequence 218 AA;
 SQ
 Query Match 100.0%; Score 1165; DB 8; Length 218;
 Best Local Similarity 100.0%; Pred. No. 1.9e-117;
 Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSEDWEKDEPQCCLDPVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 DB 1 MSFVGENSGVKGSEDWEKDEPQCCLDPVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 QY 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEKSGSPILLGVSGKEFCL 120
 DB 61 SIHQDQHKVLVLDGSLNLIAPDKNYIRPEIFFALASSLSASAEKSGSPILLGVSGKEFCL 120
 QY 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIYFRAQVGSWNMLESAHPGWICTS 180
 DB 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIYFRAQVGSWNMLESAHPGWICTS 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 RESULT 7
 ADO04679
 ID ADO04679 standard; protein; 218 AA.
 XX ADO04679;
 XX 29-JUL-2004 (first entry)
 DT

DE Human interleukin-1 zeta variant.
 XX Interleukin-1 zeta variant; inflammatory reaction; immune system;
 KW IL-1 zeta; immunological disorder; human.
 OS Homo sapiens.
 XX US2004087766-A1.
 PN 06-MAY-2004.
 PD 27-OCT-2003; 2003US-00694978.
 XX 18-SEP-1998; 98US-0100948P.
 XX 17-SEP-1999; 99US-00398412.
 XX (TIMA) TIMANS J C.
 PA Timans JC;
 PI WPI; 2004-374758/35.
 DR N-PSDB; ADO04678.
 XX New isolated or recombinant interleukin-1 zeta polypeptide and related
 PT reagents such as antibodies, useful for treating inflammatory disease and
 PT as probes for diagnosing immunological disorders.
 XX Claim 1; SEQ ID NO 4; 42pp; English.
 PS The invention relates to interleukin-1 zeta polypeptide and
 CC polynucleotide. The agonist or antagonist of the interleukin-1 zeta is
 CC useful in modulating a cell that is involved in inflammatory response.
 CC The peptide fragments of IL-1 zeta are useful in research and diagnostic
 CC tools in the study of inflammatory reactions to antigenic challenge and
 CC the development of more effective anti-inflammatory therapeutic.
 CC Interleukin-1 zeta is useful in regulation and/or development of immune
 CC system. A polynucleotide encoding IL-1 zeta is useful for detecting the
 CC expression level of the polypeptide in a patient suspected of having an
 CC immunological disorder. The present sequence is a human interleukin-1
 CC zeta variant.
 XX Sequence 218 AA;
 SQ
 Query Match 100.0%; Score 1165; DB 8; Length 218;
 Best Local Similarity 100.0%; Pred. No. 1.9e-117; Indels 0; Gaps 0;
 Matches 218; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSEDWEKDEPQCCLEDPVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 DB 1 MSFVGENSGVKGSEDWEKDEPQCCLEDPVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 QY 61 SIHQDQHKVLDLSDGNLIAPDKNYIRPEIFPALLASSLSASAEGSPILLGVSGEFL 120
 DB 61 SIHQDQHKVLDLSDGNLIAPDKNYIRPEIFPALLASSLSASAEGSPILLGVSGEFL 120
 QY 121 YCDKDKGQSHPSLQKKKELMKLAQKESARRPFIYRAQVGSWNMLESAHPGWFICTS 180
 DB 121 YCDKDKGQSHPSLQKKKELMKLAQKESARRPFIYRAQVGSWNMLESAHPGWFICTS 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 RESULT 8
 ID AAY95299 standard; protein; 218 AA.
 XX AC AAY95299;
 XX 12-SEP-2000 (first entry)
 XX Human interleukin-1 zeta splice variant TDZ.1.

XX Interleukin-1 zeta; IL-1 zeta; splice variant; human; TDZ.1;
 KW testis-derived zeta variant; therapy; inflammation; fever.
 XX Homo sapiens.
 XX WO2000036108-A2.
 XX 22-JUN-2000.
 XX 14-DEC-1999; 99WO-US029549.
 XX 14-DEC-1998; 98US-0112163P.
 XX 10-NOV-1999; 99US-0164675P.
 XX (IMMV) IMMUNEX CORP.
 XX Sims JE, Smith DE, Born TL;
 PI WPI; 2000-442387/38.
 XX N-PSDB; AAA27920.
 XX Isolated interleukin-1 (IL-1) zeta nucleic acids and splice variants
 PT TDZ1, TDZ2, TDZ3 and their encoding proteins, useful as probes for
 PT identifying genes associated with diseases such as glaucoma, and insulin-
 PT dependent diabetes mellitus.
 XX Claim 10; Page 11; 87pp; English.
 PS The present sequence is that of splice variant TDZ.1 (testis-derived zeta
 CC variant) of human interleukin-1 zeta (IL-1 zeta). TDZ.1 mRNA is generated
 CC from exons 1, 2, 4, 5 and 6 of the IL-1 zeta locus, and the encoded
 CC protein is probably a functional IL-1 like molecule. TDZ.1 mRNA is
 CC expressed most strongly in the kidney, skeletal muscle, testis, prostate,
 CC ovary, colon, small intestine, liver, placenta, lung, tonsil, foetal
 CC liver, lymph node and bone marrow. The invention is directed to novel,
 CC purified and isolated IL-1 zeta, its splice variants and Xrec2
 CC polypeptides (see AAY95297-301), the nucleic acids (see AAA27918-22)
 CC encoding such polypeptides, processes for production of recombinant forms
 CC of such polypeptides, and their uses. The polypeptides can be used to
 CC study cellular processes such as immune regulation, cell proliferation,
 CC cell death, cell migration, cell-to-cell interaction and inflammatory
 CC responses, to identify proteins associated with IL-1 zeta, to screen for
 CC potential inhibitors, and to prepare antibodies. In particular, they can
 CC be used to activate and/or inhibit the activation of vascular endothelial
 CC cells and lymphocytes, induce and/or inhibit the induction of local
 CC tissue destruction and fever, inhibit and/or stimulate macrophages and
 CC vascular endothelial cells to produce IL-6, induce and/or inhibit the
 CC induction of prostaglandins, nitric oxide synthetase, and
 CC metalloproteases, and upregulate and/or inhibit the upregulation of
 CC molecules on the surface of vascular endothelial cells
 XX Sequence 218 AA;
 SQ
 Query Match 99.7%; Score 1161; DB 3; Length 218;
 Best Local Similarity 99.5%; Pred. No. 5.2e-117;
 Matches 217; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSEDWEKDEPQCCLEDPVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 DB 1 MSFVGENSGVKGSEDWEKDEPQCCLEDPVSPLEPGPSLPAMNFVHTSPKVNLPKPF 60
 QY 61 SIHQDQHKVLDLSDGNLIAPDKNYIRPEIFPALLASSLSASAEGSPILLGVSGEFL 120
 DB 61 SIHQDQHKVLDLSDGNLIAPDKNYIRPEIFPALLASSLSASAEGSPILLGVSGEFL 120
 QY 121 YCDKDKGQSHPSLQKKKELMKLAQKESARRPFIYRAQVGSWNMLESAHPGWFICTS 180
 DB 121 YCDKDKGQSHPSLQKKKELMKLAQKESARRPFIYRAQVGSWNMLESAHPGWFICTS 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218

```
RESULT 9
AA70927
ID AAY70927 standard; protein; 218 AA.
XX
AC AAY70927;
XX
XX 05-SEP-2000 (first entry)
XX
XX Human zilla4 protein.
XX
XX Human interleukin-1, IL-1; zilla4 protein; inflammation; arthritis;
XX psoriasis; septic shock; graft-versus-host disease; leukaemia; cancer;
XX anaemia; inflammatory bowel disease; acute neuropathology; shock;
XX chronic neuropathology; respiratory disease syndrome; restenosis;
XX acquired immune deficiency syndrome; AIDS; antiinflammatory; cytostatic;
XX anti-arthritis; anti-psoriatic; antibacterial; immunosuppressive;
XX anti-anaemic; neuroprotective; vasotropic;
XX anti-human immunodeficiency virus; HIV.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT Domain 60..64 /label= Beta_strand
FT Domain 65..67 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 68..72 /label= Beta_strand
FT Domain 73..76 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 77..79 /label= Beta_strand
FT Domain 80..89 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 90..96 /label= Beta_strand
FT Domain 97..107 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 108..113 /label= Beta_strand
FT Domain 114..117 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 118..123 /label= Beta_strand
FT Domain 124..131 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 132..138 /label= Beta_strand
FT Domain 139..153 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 154..160 /label= Beta_strand
FT Domain 161..164 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 165..169 /label= Beta_strand
FT Domain 170..174 /note= "Variable loop region involved in receptor
FT binding"
FT Domain 175..179 /label= Beta_strand
FT Domain 180..186 /note= "Variable loop region involved in receptor
FT binding"
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```
FT Domain binding"
FT 187..189 /label= Beta_strand
FT 190..200 /note= "Variable loop region involved in receptor
FT binding"
FT 201..204 /label= Beta_strand
XX
XX WO200024899-A2.
XX
XX 04-MAY-2000.
XX
XX 27-OCT-1999; 99WO-US05038.
XX
XX 27-OCT-1998; 98US-00179614.
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX West RR, Sheppard PO, Gao Z;
XX
XX WPI; 2000-350740/30.
XX N-PSDB; AAD00210.
XX
XX Immunomodulatory interleukin-1 homolog zilla4 proteins, useful for
XX treatment of e.g. arthritis, psoriasis, septic shock, graft-versus-host
XX disease, leukemia.
XX
XX Claim 4; Fig 2; 88pp; English.
XX
XX The present sequence is the human interleukin (IL)-1 homolog zilla4
XX protein. This protein contains a core structure of 12 beta-strands wound
XX into a beta-barrel, with the beta-strands separated from each other by
XX loops. The loops between these beta-strands are highly variable among the
XX family members and are believed to be involved in receptor binding. The
XX zilla4 proteins modulate inflammation and other immunological processes
XX and are therefore useful for treatment of arthritis, psoriasis, septic
XX shock, graft-versus-host disease and leukaemia. Other diseases that may
XX be modulated by zilla4 proteins include cancer, anaemia, inflammatory
XX bowel disease, acute and chronic neuropathologies, shock, respiratory
XX disease syndrome, restenosis and acquired immune deficiency syndrome
XX
XX Sequence 218 AA;
XX
Query Match 99.1%; Score 1154; DB 3; Length 218;
Best Local Similarity 99.1%; Pred. No. 3e-116;
Matches 216; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 MSFVGENSGVKGSEDEWEXDEPQCCELDPAVGPLEPSPSLPAMNFVHTSPKVKNLNPKKF 60
DB 1 MSFVGENSGVKGSEDEWEXDEPQCCELDPAVGPLEPSPSLPAMNFVHTSPKVKNLNPKKF 60
QY 61 SHDQDHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120
DB 61 SHDQDHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEFCL 120
QY 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARPPFIYRAQVGSWNMLSAHPGWICTS 180
DB 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARPPFIYRAQVGSWNMLSAHPGWICTS 180
QY 181 CNCNEPVGTVTDKFNPKHIEFSPQVCKAEMSPSEUSD 218
DB 181 CNCNEPVGTVTDKFNPKHIEFSPQVCKAEMSPSEUSD 218
RESULT 10
AA70940
ID AAY96940 standard; protein; 218 AA.
XX
XX AAY96940;
XX
XX 31-OCT-2000 (first entry)
XX
```

DE Human IL-1 receptor antagonist 1 V.
 XX hIL-1RA1V; human interleukin-1 receptor antagonist-1; IL-11p;
 KW osteopathic; interleukin-1-like polypeptide; anti-inflammatory;
 KW anti-asthmatic; anti-arthritis; antimicrobial; respiratory; vaccine;
 KW anti-ischemic; dermatological; immunomodulatory; gastrointestinal;
 KW gene therapy.
 XX Homo sapiens.
 OS
 XX WO200039297-A2.
 PN 06-JUL-2000.
 PD
 XX 22-DEC-1999; 99WO-US030720.
 PF
 XX 23-DEC-1998; 98US-0113430P.
 PR 22-JAN-1999; 99US-0116843P.
 PR 13-APR-1999; 99US-0129122P.
 XX (GETH) GENENTECH INC.
 PA
 XX Goddard A, Pan J;
 PI
 XX WPI: 2000-452395/39.
 DR N-PSDB; AAA51604.
 DR
 XX Nucleic acids encoding interleukin-1-like polypeptides, useful for
 PT preventing and treating e.g. inflammation, asthma and psoriasis.
 PT
 XX Claim 22; Fig 19; 143pp; English.
 PS

XX An isolated nucleic acid molecule encoding an interleukin-1-like
 CC polypeptide (IL-11p) that retains one or more activities of the peptide
 CC from which it is derived, such as the IL-18R binding activity of a human
 CC interleukin-1 receptor antagonist-1 (hIL-1RA1) polypeptide, is new. The
 CC nucleic acids may be used in molecular engineering applications, e.g.
 CC hybridization assays and chromosome and gene mapping studies, for
 CC recombinantly producing the IL-11p polypeptide or for producing gene
 CC knock out animals to study the role of the protein in metabolism and
 CC disease processes (conversely, gene therapy protocols may be used to
 CC supplement a patient's production of the polypeptide or to rectify
 CC mutations that lead to the production of in active peptides). The
 CC peptides produced may be used to screen for and produce modulators (e.g.
 CC antibodies) of IL-11p protein expression and activity which may be used to
 CC treat disorders associated with inappropriate IL-11p expression and
 CC activity, such as inflammatory disorders, asthma, arthritis,
 CC osteoarthritis, sepsis, acute lung injury, adult respiratory distress
 CC syndrome, idiopathic pulmonary fibrosis, ischemic reperfusion disease,
 CC psoriasis, graft versus host disease and/or inflammatory bowel disease
 XX

SQ Sequence 218 AA;
 Query Match 99.1%; Score 1154; DB 3; Length 218;
 Best Local Similarity 99.1%; Pred. No. 3e-116;
 Matches 216; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSGEDWEKDEPQCCELDPAVSPLEPGPSLPAMNFVHTSPKVKNLNPKKF 60
 DB 1 MSFVGENSGVKGSGEDWEKDEPQCCELDPAVSPLEPGPSLPAMNFVHTSPKVKNLNPKKF 60
 QY 61 SIHQDQHKVLDGSLNLIAPDKNYIRPEIFPALLASSLSASAEGSPILLGVSGKEFCL 120
 DB 61 SIHQDQHKVLDGSLNLIAPDKNYIRPEIFPALLASSLSASAEGSPILLGVSGKEFCL 120
 QY 121 YCDKDKGSHPSLQKKEKLMKLAQKESARRPFIFYRAQVGSWNMLESAHPGWFICT 180
 DB 121 YCDKDKGSHPSLQKKEKLMKLAQKESARRPFIFYRAQVGSWNMLESAHPGWFICT 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218

RESULT 11
 AAB28266
 ID AAB28266 standard; protein; 218 AA.
 XX
 AC AAB28266;
 XX
 DT 13-FEB-2001 (first entry)
 XX
 XX Human interleukin-1 homologue IL-1H4.
 DE
 XX Human; interleukin-1 homologue; IL-1H4; inflammation; septicaemia;
 KW autoimmune disease; inflammatory bowel disease; psoriasis; arthritis;
 KW transplant rejection; graft versus host disease; infection; stroke;
 KW ischaemia; acute respiratory disease; allergy; asthma; restenosis;
 KW brain injury; AIDS; bone disease; osteoporosis; cancer;
 KW congestive heart failure; atherosclerosis; Alzheimer's disease.
 XX
 OS Homo sapiens.
 XX WO200063226-A1.
 PN 26-OCT-2000.
 PD
 XX 14-APR-2000; 2000WO-US010207.
 PF
 XX 16-APR-1999; 99US-00293625.
 PR
 XX (SMIK) SMITHKLINE BEECHAM CORP.
 PA
 XX Young PR, McDonnell PC;
 PI
 XX WPI: 2000-687155/67.
 DR N-PSDB; AAC66727.
 DR
 XX Interleukin-1 homolog useful for treating conditions such as chronic and
 PT acute inflammation, septicemia, autoimmune diseases ischemia, acute
 PT respiratory disease, allergies, and asthma.
 PT
 XX Claim 1; Page 28-29; 30pp; English.
 PS
 XX The present sequence is human interleukin-1 homologue (IL-1H4). IL-1H4 is
 CC useful for treating conditions such as chronic and acute inflammation,
 CC septicaemia, autoimmune diseases (e.g. inflammatory bowel disease,
 CC psoriasis, and arthritis), transplant rejection, graft versus host
 CC disease, infection, stroke, ischaemia, acute respiratory disease,
 CC allergies, asthma, restenosis, brain injury, AIDS, bone diseases (e.g.
 CC osteoporosis), cancer, congestive heart failure, atherosclerosis, and
 CC Alzheimer's disease, related to either an excess of, or an under-
 CC expression of, IL-1H4 polypeptide activity
 XX

SQ Sequence 218 AA;
 Query Match 99.1%; Score 1154; DB 3; Length 218;
 Best Local Similarity 99.1%; Pred. No. 3e-116;
 Matches 216; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSGEDWEKDEPQCCELDPAVSPLEPGPSLPAMNFVHTSPKVKNLNPKKF 60
 DB 1 MSFVGENSGVKGSGEDWEKDEPQCCELDPAVSPLEPGPSLPAMNFVHTSPKVKNLNPKKF 60
 QY 61 SIHQDQHKVLDGSLNLIAPDKNYIRPEIFPALLASSLSASAEGSPILLGVSGKEFCL 120
 DB 61 SIHQDQHKVLDGSLNLIAPDKNYIRPEIFPALLASSLSASAEGSPILLGVSGKEFCL 120
 QY 121 YCDKDKGSHPSLQKKEKLMKLAQKESARRPFIFYRAQVGSWNMLESAHPGWFICT 180
 DB 121 YCDKDKGSHPSLQKKEKLMKLAQKESARRPFIFYRAQVGSWNMLESAHPGWFICT 180
 QY 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFENRKHIEFSPQVCKAEMSPSEVSD 218

```

RESULT 12
AAB85136
ID AAB85136 standard; protein; 218 AA.
XX
AC AAB85136;
XX
DT 22-AUG-2001 (first entry)
XX
DE Interleukin-1 homologue (IL-1H4) polypeptide.
XX
KW Interleukin-1; IL-1H4; antiinflammatory; antibacterial; antiallergic;
KW immunosuppressive; antipsoriatic; antiarthritic; cytostatic; antiHIV;
KW cerebroprotective; aniaesthetic; vasotropic; vulnerable; osteopathic;
KW immunostimulant; antiarteriosclerotic; nootropic; neuroprotective;
KW gene therapy; vaccine.
XX
XX Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..20
FT /note= "signal peptide"
FT Cleavage-site 20..21
FT Protein 21..218
FT /note= "specifically claimed mature protein (AAB85138)"
XX
XX WO200140247-A1.
XX
XX 07-JUN-2001.
XX
XX 30-NOV-2000; 2000WO-US032521.
XX
XX 01-DEC-1999; 99US-00452140.
XX
XX (SMIK ) SMITHKLINE BEECHAM CORP.
XX
XX Kumar S, McDonnell PC, Young PR;
XX
XX WPI; 2001-389949/41.
XX
XX N-PSDB; AAF84120.
XX
XX Novel Interleukin-1 homologue, IL-1H4, for treating chronic and acute
XX inflammation, septicemia, autoimmune diseases, transplant rejection,
XX graft versus host disease, stroke, ischemia, allergy and asthma.
XX
XX Example; Page 29; 30pp; English.
XX
XX The invention provides an isolated interleukin-1 homologue, IL-1H4
XX polypeptide. The IL-1H4 polypeptide can be expressed by standard
XX recombinant methodology. The IL-1H4 polypeptide, polynucleotides and
XX modulators are useful for treating chronic and acute inflammation,
XX septicemia, autoimmune diseases (e.g., inflammatory bowel disease,
XX psoriasis and arthritis), transplant rejection, graft versus host
XX disease, infection, stroke, ischemia, acute respiratory disease syndrome,
XX allergies, asthma, restenosis, brain injury, AIDS, bone diseases (e.g.,
XX osteoporosis), cancer (e.g., lymphoproliferative disorders), congestive
XX heart failure, atherosclerosis and Alzheimer's disease. The IL-1H4
XX polynucleotides are useful as diagnostic reagents and for chromosome
XX identification. The present sequence represents the IL-1H4 polypeptide
XX
SQ Sequence 218 AA;
Query Match 99.1%; Score 1154; DB 4; Length 218;
Best Local Similarity 99.1%; Pred. No. 3e-116;
Matches 216; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 MSFVGENSGVKGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLNPKKF 60
Db 1 MSFVGENSGVKGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLNPKKF 60
Qy 61 SIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEKGSPIILGVSKGFCL 120
Db 61 SIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEKGSPIILGVSKGFCL 120
Qy 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGSNNMLESAAHFGWFICTS 180
Db 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGSNNMLESAAHFGWFICTS 180
Qy 181 CNCNEPVGVTDKFENRKHIEFSFPQVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSFPQVCKAEMSPSEVSD 218

RESULT 13
ADN05012
ID ADN05012 standard; protein; 218 AA.
XX
AC ADN05012;
XX
DT 01-JUL-2004 (first entry)
XX
DE Antipsoriatic protein sequence #686.
XX
KW antipsoriatic; gene therapy; psoriasis; diagnosis.
XX
OS Homo sapiens.
XX
XX WO2004028479-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030907.
XX
XX 25-SEP-2002; 2002US-0414006P.
XX
XX (GETH ) GENENTECH INC.
XX
XX Bodary S, Clark H, Jackman J, Schoenfeld J, Williams PM, Wood WT;
XX Wu TD;
XX
XX WPI; 2004-305105/28.
XX
XX N-PSDB; ADN05011.
XX
XX New PRO nucleic acid or polypeptide, useful for preparing a
XX pharmaceutical composition for diagnosing or treating psoriasis in a
XX mammal.
XX
XX Claim 9; SEQ ID NO 1406; 3069pp; English.
XX
XX The invention relates to novel polynucleotide and polypeptides for
XX treating psoriasis or a sequence having at least 80% identity to the
XX above sequences. The nucleic acid is useful for preparing a composition
XX for diagnosing or treating psoriasis in a mammal. This sequence
XX corresponds to one of the polypeptides of the invention.
XX
SQ Sequence 218 AA;
Query Match 99.1%; Score 1154; DB 8; Length 218;
Best Local Similarity 99.1%; Pred. No. 3e-116;
Matches 216; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 MSFVGENSGVKGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLNPKKF 60
Db 1 MSFVGENSGVKGSEDEKDEPQCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLNPKKF 60
Qy 61 SIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEKGSPIILGVSKGFCL 120
Db 61 SIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEKGSPIILGVSKGFCL 120
Qy 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGSNNMLESAAHFGWFICTS 180
Db 121 YCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYRAQVGSNNMLESAAHFGWFICTS 180
Qy 181 CNCNEPVGVTDKFENRKHIEFSFPQVCKAEMSPSEVSD 218
Db 181 CNCNEPVGVTDKFENRKHIEFSFPQVCKAEMSPSEVSD 218

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QY 181 CNCNEPVGVTDKFNKRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFNKRKHIDFSFQVCKAEMSPSEVSD 218
 RESULT 15
 ADH89067
 ID ADH89067 standard; protein; 218 AA.
 XX AC ADH89067;
 XX DT 22-APR-2004 (first entry)
 XX DE Human zilla4 polypeptide.
 XX KW Human; interleukin-1 homologue; IL-1; zilla4; immune response;
 KW inflammatory disease; cancer; anaemia; immunomodulator; antiinflammatory;
 KW cytostatic; antianaemic.
 XX OS Homo sapiens.
 XX PN US2003148467-A1.
 XX PD 07-AUG-2003.
 XX PF 22-NOV-2002; 2002US-00302554.
 XX PR 27-OCT-1998; 98US-0105824P.
 XX PR 27-OCT-1999; 99US-00428118.
 XX PA (ZYMO) ZYMOGENETICS INC.
 XX PI West RR, Sheppard PO, Gao Z;
 XX DR WPI; 2003-897576/82.
 XX DR N-PSDB; ADH89066.
 XX PT New interleukin-1 homolog Zilla4 protein, useful for modulating an immune
 PT response and for treating diseases, e.g., inflammatory diseases, cancer
 PT or anemia.
 XX PS Claim 8; SEQ ID NO 2; 44pp; English.
 XX CC The present invention relates to the isolation of human interleukin-1 (IL
 CC -1) homologues designated zilla4, and the polynucleotide sequences that
 CC encode them. The gene encoding human zilla4 is located on chromosome 2.
 CC Also disclosed is a method of making these proteins and a method of
 CC modulating an immune response. The proteins are useful for treating
 CC diseases such as inflammatory diseases, cancer, and anaemia. The present
 CC sequence represents human zilla4.
 XX SQ Sequence 218 AA;
 Query Match 98.8%; Score 1151; DB 7; Length 218;
 Best Local Similarity 98.6%; Pred. No. 6.3e-116;
 Matches 215; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSGDEWKEBPQCCLDDPAVSPLEPGPSLPAMNFVHTSPKVKLNLPKPF 60
 DB 1 MSFVGENSGVKGSGDEWKEBPQCCLDDPAVSPLEPGPSLPAMNFVHTSPKVKLNLPKPF 60
 QY 61 SIHDQDHKVLVLDGSLNIAPDKNYIRPEIFALASSLSASAEGSPILLGVSKGEFCL 120
 DB 61 SIHDQDHKVLVLDGSLNIAPDKNYIRPEIFALASSLSASAEGSPILLGVSKGEFCL 120
 QY 121 YCDKDXGQSHPSLQKKKLMKLAQKESARRPFIFFRAQVGSWNMLESAHPGWFICT 180
 DB 121 YCDKDXGQSHPSLQKKKLMKLAQKESARRPFIFFRAQVGSWNMLESAHPGWFICT 180
 QY 181 CNCNEPVGVTDKFNKRKHIEFSPQVCKAEMSPSEVSD 218
 DB 181 CNCNEPVGVTDKFNKRKHIEFSPQVCKAEMSPSEVSD 218

RESULT 14
 AAY71084
 ID AAY71084 standard; protein; 218 AA.
 XX AC AAY71084;
 XX DT 05-SEP-2000 (first entry)
 XX DE Human zilla4-E200D variant protein.
 XX KW Human interleukin-1, IL-1; zilla4 protein; inflammation; arthritis;
 KW psoriasis; septic shock; graft-versus-host disease; leukaemia; cancer;
 KW anaemia; inflammatory bowel disease; acute neuropathology; shock;
 KW chronic neuropathology; respiratory disease syndrome; restenosis;
 KW acquired immune deficiency syndrome; AIDS; antiinflammatory; cytostatic;
 KW anti-arthritis; anti-psoriasis; antibacterial; immunosuppressive;
 KW anti-anaemic; neuroprotective; vasotropic; variant;
 KW anti-human immunodeficiency virus; HIV.
 XX OS Homo sapiens.
 XX PN WO200024899-A2.
 XX PD 04-MAY-2000.
 XX PF 27-OCT-1999; 99WO-US025038.
 XX PR 27-OCT-1998; 98US-00179614.
 XX PA (ZYMO) ZYMOGENETICS INC.
 XX PI West RR, Sheppard PO, Gao Z;
 XX DR WPI; 2000-350740/30.
 XX PT Immunomodulatory interleukin-1 homolog zilla4 proteins, useful for
 PT treatment of e.g. arthritis, psoriasis, septic shock, graft-versus-host
 PT disease, leukemia.
 XX PS Claim 3; Page; 88pp; English.
 XX CC The present sequence is a variant of human interleukin (IL)-1 homolog
 CC zilla4 protein, consisting of Asp in place of Glu at position 200. The
 CC replacement of Glu (200) with Asp results in attenuation of pro-
 CC inflammatory activity of zilla4 protein. The zilla4 proteins modulate
 CC inflammation and other immunological processes and are therefore useful
 CC for treatment of arthritis, psoriasis, septic shock, graft-versus-host
 CC disease and leukaemia. Other diseases that may be modulated by zilla4
 CC proteins include cancer, anaemia, inflammatory bowel disease, acute and
 CC chronic neuropathologies, shock, respiratory disease syndrome, restenosis
 CC and acquired immune deficiency syndrome. Note: The present sequence is
 CC not shown in the specification but is derived from human zilla4 protein
 CC sequence shown in figure-2 (AAY70927)
 XX SQ Sequence 218 AA;
 Query Match 98.8%; Score 1151; DB 3; Length 218;
 Best Local Similarity 98.6%; Pred. No. 6.3e-116;
 Matches 215; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MSFVGENSGVKGSGDEWKEBPQCCLDDPAVSPLEPGPSLPAMNFVHTSPKVKLNLPKPF 60
 DB 1 MSFVGENSGVKGSGDEWKEBPQCCLDDPAVSPLEPGPSLPAMNFVHTSPKVKLNLPKPF 60
 QY 61 SIHDQDHKVLVLDGSLNIAPDKNYIRPEIFALASSLSASAEGSPILLGVSKGEFCL 120
 DB 61 SIHDQDHKVLVLDGSLNIAPDKNYIRPEIFALASSLSASAEGSPILLGVSKGEFCL 120
 QY 121 YCDKDXGQSHPSLQKKKLMKLAQKESARRPFIFFRAQVGSWNMLESAHPGWFICT 180
 DB 121 YCDKDXGQSHPSLQKKKLMKLAQKESARRPFIFFRAQVGSWNMLESAHPGWFICT 180

Search completed: September 29, 2005, 11:12:56
Job time : 65.5 secs

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OM protein - protein search, using sw model
Run on: September 29, 2005, 11:04:58 ; Search time 25.5 seconds
(without alignments)
822.559 Million cell updates/sec

Title: US-10-695-195-4
Perfect score: 1165
Sequence: 1 MSFVGENSGVKGSEDEKID.....IEFSFQVCKAEMSPSEVSD 218

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues
Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR.79.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	172.5	14.8	155	2 JC7104	interleukin-1 rece
2	159	13.6	178	2 A44610	interleukin-1 rece
3	150.5	12.9	177	2 A54377	interleukin-1 rece
4	149.5	12.8	177	2 A30368	interleukin-1 rece
5	149.5	12.8	180	2 A9386	interleukin-1 rece
6	144.5	12.4	178	2 C40956	interleukin-1 rece
7	127.5	10.9	266	1 S23010	interleukin-1 beta
8	122	10.5	267	2 S38373	interleukin-1 beta
9	119.5	10.3	267	1 JN0724	interleukin-1 beta
10	112.5	9.7	266	1 ICE018	interleukin-1 beta
11	106.5	9.1	269	1 I55969	interleukin-1 beta
12	104.5	9.0	269	1 ICHU18	interleukin-1 beta
13	95	8.2	214	2 JC5646	interleukin-1 beta
14	91	7.8	404	2 S34031	KTR3 protein - yea
15	89	7.6	268	1 A30584	interleukin-1 beta
16	85	7.3	270	1 ICNS1	interleukin-1 alph
17	83	7.1	448	2 JN0118	glucan 1,3-beta-gl
18	82.5	7.1	845	2 TL7291	hypothetical prote
19	82.5	7.1	1026	2 T18220	chitin synthase (E
20	82	7.0	471	2 S54460	hypothetical prote
21	81	7.0	773	2 T46188	inhibition protein
22	81	7.0	776	2 S67053	probable membrane
23	80	6.9	1179	2 T04488	DNA topoisomerase
24	79.5	6.8	557	1 S15342	transcription fact
25	79.5	6.8	740	2 F71369	conserved hypothet
26	79	6.8	1405	2 T04426	hypothetical prote
27	78.5	6.7	247	2 C82891	hemolysin UUA36 li
28	78	6.7	425	2 I56329	gene D3 protein -
29	78	6.7	425	2 T24522	hypothetical prote

30	78	6.7	544	2 S41095	triacylglycerol li
31	78	6.7	737	2 T46101	ABC transporter-11
32	77.5	6.7	700	2 F84601	probable ubiquitin
33	77.5	6.7	826	2 I38972	hypoxia-inducible
34	77.5	6.7	1539	2 G70630	probable ctpH prot
35	77.5	6.7	1706	2 I84499	zinc finger protei
36	77.5	6.7	1863	1 A58881	breat/ovarian can
37	77	6.6	375	2 F70151	protein-glutamate
38	77	6.6	544	2 S41096	triacylglycerol li
39	77	6.6	563	1 PN0493	triacylglycerol li
40	77	6.6	764	2 A45321	protein-glutamine
41	77	6.6	772	2 D98504	protein-9CI6.25 f
42	77	6.6	859	2 C87358	hypothetical prote
43	76.5	6.6	568	2 I39411	AF-9 protein - hum
44	76.5	6.6	571	2 D86164	hypothetical prote
45	76.5	6.6	627	2 T02846	dynein light chain

ALIGNMENTS

RESULT 1

JC7104
interleukin-1 receptor antagonist - human
C:Species: Homo sapiens (man)
C:Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004
C:Accession: JC7104
R:Mulero, J.J.; Pace, A.M.; Nelken, S.T.; Loeb, D.B.; Correa, T.R.; Drmanac, R.; Ford, Biochem. Biophys. Res. Commun. 263, 702-706, 1999
A:Title: IL1HV1: A novel interleukin-1 receptor antagonist gene.
A:Reference number: JC7104; MUID:99443727; PMID:10512743
A:Accession: JC7104
A:Molecule type: mRNA
A:Residues: 1-155 <MUL>
A:Cross-references: UNIPROT:Q9UBH0; GB:AF186094; NID:G6049804; PIDN:AAF02757.1; PID:560

C:Genetics:
A:Gene: il1hv1
A:Map position: 2q14
C:Keywords: macrophage

Query Match 14.8%; Score 172.5; DB 2; Length 155;
Best Local Similarity 33.6%; Pred. No. 7.5e-09;
Matches 51; Conservative 17; Mismatches 47; Indels 37; Gaps 6;

Qy	60	FSIHQDHQKVLVDGMLIAVPDKNYRPEIFFALASSLSASAEKG	-----106
Db	9	FRMKDSALKVLYLHNQI	-----LAGLHAGKVIKGEISVVPNRWLD 52
Qy	107	--SPILGVSKGEFCLYCDKDKGQSPSLQKKKMLKML-AAQKESARRPFIFRAQVGS 163	
Db	53	SLSPVILGVQGGSCQLSC--GVGQ-EPTLTLEPVMIMELYLGAKES--KSFTFYRDDMGL 107	
Qy	164	WNMLESAHPQWFICTSCNCPNEPVGVTDKFEN 195	
Db	108	TSSPESAAYPGWFLCTVPEADQPVRLTQLPEN 139	

RESULT 2

A44610
interleukin-1 receptor antagonist precursor - mouse
N:Alternate names: IL-1RA
C:Species: Mus musculus (house mouse)
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
C:Accession: A44610; B40956; A49031; I56106; I52970
R:Matsumura, H.; Roussel, M.F.; Matsushima, K.; Hishinuma, A.; Sherr, C.J. Blood 78, 616-623, 1991
A:Title: Cloning and expression of murine interleukin-1 receptor antagonist in macroph
A:Reference number: A44610; MUID:91316273; PMID:1830498
A:Accession: A44610
A:Molecule type: mRNA
A:Residues: 1-178 <MAT>
A:Cross-references: UNIPROT:P25085; GB:J64404; NID:G198296; PIDN:AAA39277.1; PID:G1982
R:Eisenberg, S.P.; Brewer, M.T.; Verderber, E.; Heimdal, P.; Brandhuber, B.J.; Thompson,

Proc. Natl. Acad. Sci. U.S.A. 88, 5232-5236, 1991
A;Title: Interleukin 1 receptor antagonist is a member of the interleukin 1 gene family:
A;Reference number: A40956; MUID:91271363; PMID:1828896
A;Accession: B40956
A;Molecule type: DNA
A;Residues: 7-178 <EIS>
A;Cross-references: GB:M63100; NID:g198389; PIDN:AAA39310.1; PID:g198390
R;Shuck, M.E.; Eessalu, T.E.; Tracey, D.E.; Bienkowski, M.J.
Eur. J. Immunol. 21, 2775-2780, 1991
A;Title: Cloning, heterologous expression and characterization of murine interleukin 1
A;Reference number: A49031; MUID:92037824; PMID:1834470
A;Accession: A49031
A;Molecule type: mRNA
A;Residues: 23-178 <SHU>
A;Cross-references: GB:564082; NID:g238584; PIDN:AAB20265.1; PID:g238585
A;Experimental source: peritoneal macrophages, ICR strain
A;Note: sequence extracted from NCBI backbone (NCBIN:64082, NCBIP:64085)
R;Zahedi, K.; Seidlin, M.F.; Rits, M.; Ezekowitz, R.B.; Whitehead, A.S.
J. Immunol. 146, 4228-4233, 1991
A;Title: Mouse IL-1 receptor antagonist protein: Molecular characterization, gene mapping
A;Reference number: I56106; MUID:91250712; PMID:1828262
A;Accession: I56106
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-178 <RES>
A;Cross-references: GB:M74294; NID:g198387; PIDN:AAA39309.1; PID:g198388
R;Zahedi, K.A.; Uhlar, C.M.; Rits, M.; Prada, A.E.; Whitehead, A.S.
Cytokine 6, 1-9, 1994
A;Title: The mouse interleukin 1 receptor antagonist protein: gene structure and regulation
A;Reference number: I52970; MUID:94271931; PMID:8003626
A;Accession: I52970
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-178 <RE2>
A;Cross-references: GB:I32838; NID:g487864; PIDN:AAA20576.1; PID:g528978
C;Genetics:
A;Gene: IL-1rn
A;Introns: 40/2; 70/1; 107/3
C;Superfamily: interleukin-1
C;Keywords: cytokine receptor
F;1-26/Domain: signal sequence #status predicted <SIG>
F;21-178/Product: interleukin-1 receptor antagonist #status predicted <MA2>
Query Match 13.6%; Score 159; DB 2; Length 178;
Best Local Similarity 32.7%; Pred. No. 1.6e-07;
Matches 48; Conservative 23; Mismatches 64; Indels 12; Gaps 7;
Qy 60 FSIHQDQHKVLVLDGSLIAVPDKNYIRPEIFPALSLSASAEGKSPILLGVSGEF 118
Db 39 FRIWDTNQKTFYLRNNQLIA---GYLQGFNI--KLEEKIDMVPIDILHS-VFLGIHGKGL 91
Qy 119 CLYCDKQGSHPSLQKKEKMLAAQKESARRPFIYRAQVGSWNMLESAHPGWGFC 178
Db 92 CLSCAKSGDDI--KLQEEVNITDLSKNKEQDKR-FTFIRSEKPTTSFSAACPGWFLC 148
Qy 179 TSCNCPNPFVGVTDKFENRKH-EPSPQ 204
Db 149 TTLEADRPVSLTNPPEPLIVTKYFQ 175
RESULT 3
A54377
interleukin-1 receptor antagonist secreted form precursor - rabbit
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 06-Oct-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: A54377; I46729
R;Cominelli, F.; Bortolami, M.; Pizarro, T.T.; Monsacchi, L.; Ferretti, M.; Brewer, M.T.
J. Biol. Chem. 269, 6962-6971, 1994
A;Title: Rabbit interleukin-1 receptor antagonist. Cloning, expression, functional characterization
A;Reference number: A54377; MUID:94165101; PMID:7509813
A;Accession: A54377
A;Molecule type: mRNA
A;Residues: 1-177 <COM>

A;Cross-references: UNIPROT:P26890; GB:S68977; NID:g545740; PIDN:AAB30093.1; PID:g54574
A;Experimental source: colon tissue
A;Note: sequence extracted from NCBI backbone (NCBIN:144168, NCBIP:144169)
R;Goto, F.; Goto, K.; Miyata, T.; Ohkawara, S.; Takao, T.; Mori, S.; Furukawa, S.; Maed
Immunology 77, 235-244, 1992
A;Title: Interleukin-1 receptor antagonist in inflammatory exudate cells of rabbits. Pro
A;Reference number: I46729; MUID:93052512; PMID:1427977
A;Accession: I46729
A;Status: translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-177 <GOT>
A;Cross-references: GB:D21832; NID:g425787; PIDN:BAA04860.1; PID:g452205
C;Superfamily: interleukin-1
C;Keywords: cytokine receptor; extracellular protein; glycoprotein
F;1-25/Domain: signal sequence #status predicted <SIG>
F;109/Binding site: carboxylate (Asn) (covalent) #status predicted
Query Match 12.9%; Score 150.5; DB 2; Length 177;
Best Local Similarity 28.0%; Pred. No. 1e-06;
Matches 42; Conservative 21; Mismatches 42; Indels 45; Gaps 6;
Qy 60 FSIHQDQHKVLVLDGSLIA-----VPDKNYIRPEIFPALSLSASA 103
Db 38 FRIWDTNQKTFYLRNNQLVAGVLOGPNKLEERIDVVP-----LEPQLLF----- 82
Qy 104 EKGSPILLGVSGEFCLYCDK--DKQSHPSLQKKEKMLAAQKESARRPFIYRAQV 161
Db 83 -----LGIRGKLCCLSCVSKSGDKMLH---LEAVNITDLGKNKEQDKR-PTFIRSNS 130
Qy 162 GSNWMLESAHPGWGFCITSCNCPNPFVGVTD 191
Db 131 GPTTTFESACPGWFLCTALEADQPVSLTN 160
RESULT 4
A30368
interleukin-1 receptor antagonist secreted form precursor - human
C;Species: Homo sapiens (man)
C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 09-Jul-2004
C;Accession: A40956; I37894; A30368; S08160; S08159; A37822
R;Eisenberg, S.P.; Brewer, M.T.; Verderber, E.; Heimdal, P.; Brandhuber, B.J.; Thompson
Proc. Natl. Acad. Sci. U.S.A. 88, 5232-5236, 1991
A;Title: Interleukin 1 receptor antagonist is a member of the interleukin 1 gene family
A;Reference number: A40956; MUID:91271363; PMID:1828896
A;Accession: A40956
A;Molecule type: DNA
A;Residues: 1-177 <EIS>
A;Cross-references: UNIPROT:P18510; GB:M63099; NID:g186385; PIDN:AAB41943.1; PID:g186388
R;Jennard, A.; Gorman, P.; Carrier, M.; Griffiths, S.; Scotney, H.; Sheer, D.; Solari, I
Cytokine 4, 83-89, 1992
A;Title: Cloning and chromosome mapping of the human interleukin-1 receptor antagonist
A;Reference number: I37894; MUID:92338323; PMID:1385987
A;Accession: I37894
A;Status: translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-177 <LEN>
A;Cross-references: EMBL:X64532; NID:g33798; PIDN:CAA45832.1; PID:g33799
R;Garter, D.B.; Deibel Jr., M.R.; Dunn, C.J.; Tomich, C.S.C.; Laborde, A.L.; Slightom, J
J. G.; Sieu, L.C.; Hardee, M.M.; Zurcher-Neely, H.A.; Reardon, I.M.; Heinrichson, R.L.; T
Nature 344, 633-638, 1990
A;Title: Purification, cloning, expression and biological characterization of an interl
A;Reference number: A30368; MUID:90220867; PMID:2139180
A;Accession: A30368
A;Molecule type: mRNA
A;Residues: 1-177 <CAR>
A;Cross-references: GB:X53296; NID:g32578; PIDN:CAA37386.1; PID:g32579
A;Note: parts of this sequence, including the amino end of the mature protein, were con
R;Eisenberg, S.P.; Evans, R.J.; Arend, W.P.; Verderber, E.; Brewer, M.T.; Hannum, C.H.;
Nature 343, 341-346, 1990
A;Title: Primary structure and functional expression from complementary DNA of a human
A;Reference number: S08160; MUID:90136921; PMID:2137201
A;Accession: S08160
A;Status: not compared with conceptual translation

A;Residues: 1-266 <SEO>
A;Cross-references: UNIPROT:P21621; EMBL:X56972; NID:g1808; PIDN:CAA40293.1; PID:g1809
A;Note: the sequence from fig. 1 is inconsistent with that from Fig. 2 in having an additional
R;Sargan, D.R.
submitted to the EMBL Data Library, May 1992
A;Reference number: S43047
A;Accession: S43047
A;Molecule type: mRNA
A;Residues: 1-13,'C',15-54,'K',56-63,'A',65-144,'L',146-266 <SAR>
A;Cross-references: EMBL:X54796; NID:g1273; PIDN:CAA38566.1; PID:g1274
R;Fiskersstrand, C.; Sargan, D.
Nucleic Acids Res. 18, 7165, 1990
A;Title: Nucleotide sequence of ovine interleukin-1 beta.
A;Reference number: S13092; MUID:91088326; PMID:2263490
A;Accession: S13092
A;Molecule type: mRNA
A;Residues: 1-13,'C',15-54,'K',56-61,'S',63,'A',65-144,'L',146-266 <FIS>
A;Cross-references: EMBL:X54796
A;Note: the authors translated the codon AGT for residue 62 as Arg
R;Andrews, A.E.; Barcham, G.J.; Brandon, M.R.; Nash, A.D.
Immunology 74, 453-460, 1991
A;Title: Molecular cloning and characterization of ovine IL-1alpha and IL-1beta.
A;Reference number: A61246; MUID:92120716; PMID:1769692
A;Accession: B61246
A;Molecule type: mRNA
A;Residues: 1-144,'L',146-266 <AND>
A;Comment: This protein lacks a conventional signal sequence for protein export. Cleavage
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin-1a
C;Genetics:
A;Gene: IL-1-beta
C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen
P;114-266/Product: interleukin-1 beta #status predicted <MAT>
Query Match 10.9%; Score 127.5; DB 1; Length 266;
Best Local Similarity 29.5%; Pred. No. 0.00025;
Matches 39; Conservative 26; Mismatches 58; Indels 9; Gaps 6;
QY 59 KFSIHDDQHKVLDLSG---NLIAVPDKNIRPIFFALASSLSASAEKSGPILLGVSK 115
DB 120 KCKLDREQSLVLDSDFCVLKALHLPQEMSR-EVFCM-SFVQGEERDNKIPVALGIRD 177
QY 116 GEFCLYCDKDGQSHPSLQKKEKLMKLAQAQKESARRPFIFYRAQVGSWNMLSAHAHPGW 175
DB 178 KNLVLSCKV-KGDT-PTLQL--EEDVPKVPKRNMEKRFVYKTEIKNTVFESVLPVNW 233
QY 176 FICTSCNCEPV 187
DB 234 YISTSQTEERPV 245
RESULT 8
interleukin-1 beta precursor - pig
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 20-May-1994 #sequence_revision 01-Dec-1995 #text_change 09-Jul-2004
C;Accession: S38373
R;Vandenbroeck, K.; Fiten, P.; Beuken, E.; Martens, E.; Janssen, A.; van Damme, J.; Opde
Eur. J. Biochem. 217, 45-52, 1993
A;Title: Gene sequence, cDNA construction, expression in Escherichia coli and genetically
A;Reference number: S38373; MUID:94039070; PMID:8223584
A;Accession: S38373
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-267 <VAN>
A;Cross-references: UNIPROT:Q20802; EMBL:X74568; NID:g407899; PIDN:CAA52660.1; PID:g4079
C;Genetics:
A;Introns: 16/2; 33/3; 99/1; 154/1; 197/3
C;Superfamily: interleukin-1
Query Match 10.5%; Score 122; DB 2; Length 267;
Best Local Similarity 27.2%; Pred. No. 0.00082;

Matches 50; Conservative 33; Mismatches 77; Indels 24; Gaps 9;
QY 19 KDEPQ-----CCLEDDPA---VSPLEPGPSL---PAMNFVHTSPKYNLNPKKFSIHDQD 66
DB 72 KEPMNPSSQVVCDDDDPKSIFSSVFEEPIVLEKHANGFLCDATPVQSVDCD---LQDKD 128
QY 67 HKVLVLDGSLIAVPD--KNYIRPEIFFALASSLSASAEKSGPILLGVSKGEFCLYC-D 123
DB 129 EKALVLAGPHEHLKALHLLKGLKREVVFCMSFVQGGSDDK-IPVTLIGKGNLYLSCVM 187
QY 124 KDKGQSHPSLQKKEKLMKLAQAQKESARRPFIFYRAQVGSWNMLSAHAHPGFICTSCNC 183
DB 188 KD---DTPTLQL--EEDVPKVPKRNMEKRFVYKTEIKNRVEFESALYPNWYISTSQAE 242
QY 184 NEPV 187
DB 243 QKPV 246
RESULT 9
JN0724
interleukin-1 beta precursor - pig
N;Alternate names: hematopoietin-1; IL-1 beta
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 14-Jul-1994 #sequence_revision 22-Nov-1996 #text_change 09-Jul-2004
C;Accession: JN0724
R;Huehner, M.J.; Lin, G.; Smith, D.M.; Murtaugh, M.P.; Molitor, T.W.
Gene 129, 285-289, 1993
A;Title: Cloning, sequencing and regulation of an mRNA encoding porcine interleukin-1 b
A;Reference number: JN0724, MUID:93314975; PMID:8325511
A;Accession: JN0724
A;Molecule type: mRNA
A;Residues: 1-267 <HUE>
A;Cross-references: UNIPROT:P26889; GB:M86725; NID:g164607; PIDN:AAA02584.1; PID:g16460
A;Experimental source: alveolar macrophage
C;Comment: This protein is a pleiotropic cytokine that mediates a variety of processes
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin-1
C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lipoprotein; lymphokine; macroph
F;115-267/Product: interleukin-1 beta #status predicted <ILI>
F;77/Binding site: myristate (Iys) (covalent) #status predicted
Query Match 10.3%; Score 119.5; DB 1; Length 267;
Best Local Similarity 27.0%; Pred. No. 0.0014;
Matches 37; Conservative 27; Mismatches 64; Indels 9; Gaps 5;
QY 54 NLNPKKFSIHDDQHKVLDLSGSLIAVPD--KNYIRPEIFFALASSLSASAEKSGPILL 111
DB 116 NVQSMCKLQDKDKHKSILVLAGPHMLKALHLLTGDLKREVVFCM-SFVQGGDSNNKIPVTL 174
QY 112 GVSKEGFCLYC-DKDKGQSHPSLQKKEKLMKLAQAQKESARRPFIFYRAQVGSWNMLSA 170
DB 175 GIKGNLYLSCVMKD---NTPTLQL--EDIDPKVPKRNMEKRFVYKTEIKNRVEFESA 229
QY 171 AHFGWFICTSCNCEPV 187
DB 230 LYENWYISTSQAEQKPV 246
RESULT 10
ICB01B
interleukin-1 beta precursor - bovine
N;Alternate names: hematopoietin-1; IL-1 beta
C;Species: Bos primigenius taurus (cattle)
C;Date: 31-Mar-1989 #sequence_revision 31-Mar-1989 #text_change 09-Jul-2004
C;Accession: JLO010; S01380
R;Maliszewski, C.R.; Baker, P.E.; Schoenborn, M.A.; Davis, B.S.; Cosman, D.; Gillis, S.
Mol. Immunol. 25, 429-437, 1988
A;Title: Cloning, sequence and expression of bovine interleukin 1-alpha and interleukin
A;Reference number: A94695; MUID:88318652; PMID:3261832
A;Accession: JLO010

A;Molecule type: mRNA
A;Residues: 1-266 <MAL>
A;Cross-references: UNIPROT:P09428; GB:M37211; NID:g1632200; PIDN:AAA30584.1; PID:g163201
R;Leong, S.K.; Flagg, G.M.; Lawman, M.; Gray, P.W.
Nucleic Acids Res. 16, 9054, 1988
A;Title: The nucleotide sequence for the cDNA of bovine interleukin-1 beta.
A;Reference number: S01380; MUID:89016591; PMID:3262866
A;Accession: S01380
A;Molecule type: mRNA
A;Residues: 1-251, A, 253-266 <LEO>
A;Cross-references: EMBL:X12498; NID:9448; PIDN:CAA31018.1; PID:g449
C;Comment: This protein is a cytokine that mediates a variety of immunoregulatory and inflammatory responses. This protein lacks a conventional signal sequence for protein export. Cleaved form of interleukin-1 beta, unlike interleukin-1 alpha, is inactive.
C;Comment: Interleukin-1 beta precursor is less heavily myristoylated than interleukin-1 alpha.
C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen
F;114-266/Product: interleukin-1 beta #status predicted <MAT>

Query Match 9.7%; Score 112.5; DB 1; Length 266;
Best Local Similarity 27.5%; Pred. No. 0.0064;
Matches 36; Conservative 25; Mismatches 63; Indels 7; Gaps 5;

Qy 59 KFSIHDDQHKVLDGSLIAPVD--KNYIRPEIFFALASSLSASAEKSGPILLGVSKG 116
Db 120 KCKLQDREKSLVSLASPCVLCALHLLSQEMREVFCN-SFVQGEERDNKIPVALGIKDK 178

Qy 117 BFCYCDKQKQSHPSLQKKEKMLAAQKESARRPFIFRAQVGSWMLESAAHPGWF 176
Db 179 NLVLSCKV-KGDT--PTLQL--EEVDPKYKPRNMEKRFVFKTKIKNTVEFESVLYPNWY 234

Qy 177 ICTSCNCEPV 187
Db 235 ISTSQIERPV 245

RESULT 11
155969
Interleukin-1 beta precursor - mouse
N;Alternate names: hematopoietin-1; IL-1 beta
C;Species: Mus musculus (house mouse)
C;Date: 26-Jul-1996 #sequence revision 22-Nov-1996 #text_change 09-Jul-2004
C;Accession: I55969; A24719; S13029
R;Gray, P.W.; Glaister, D.; Chen, E.; Goeddel, D.V.; Pennica, D.
J. Immunol. 137, 3644-3648, 1986
A;Title: Two interleukin 1 genes in the mouse: Cloning and expression of the cDNA for mouse interleukin 1 beta.
A;Reference number: I55969; MUID:87058957; PMID:3491144
A;Accession: I55969
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-269 <RES>
A;Cross-references: UNIPROT:P10749; GB:M15131; NID:g198293; PIDN:AAA39276.1; PID:g309398
R;Telford, J.L.; Macchia, G.; Massone, A.; Carinci, V.; Palla, E.; Melli, M.
Nucleic Acids Res. 14, 9955-9963, 1986
A;Title: The murine interleukin 1-beta gene: structure and evolution.
A;Reference number: A24719; MUID:87117546; PMID:3492706
A;Accession: A24719
A;Molecule type: mRNA
A;Residues: 1-269 <TEL>
A;Cross-references: GB:X04964; NID:g52666; PIDN:CAA28637.1; PID:g52667
R;Daumy, G.O.; Wilder, C.L.; Merenda, J.M.; McColl, A.S.; Geoghagan, K.F.; Otterness, I.
FEBS Lett. 278, 98-102, 1991
A;Title: Reduction of biological activity of murine recombinant interleukin-1 beta by selective cleavage of the N-terminal amino acid residues.
A;Reference number: S13029; MUID:91130610; PMID:1993481
A;Accession: S13029
A;Status: preliminary
A;Molecule type: protein
A;Residues: 118-269 <DAU>
C;Comment: This protein lacks a conventional signal sequence for protein export. Cleaved form of interleukin-1 beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-1 beta precursor is less heavily myristoylated than interleukin-1 alpha.
C;Genetics:
A;Gene: IL-1-beta

C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen
F;118-269/Product: interleukin-1 beta #status experimental <ILI>

Query Match 9.1%; Score 106.5; DB 1; Length 269;
Best Local Similarity 23.7%; Pred. No. 0.024;
Matches 49; Conservative 37; Mismatches 86; Indels 35; Gaps 9;

Qy 2 SFVGENSGVMKSGEDMEKDEPQCCELEDPVSPLEPGPSLPAMNFVHTSPVKYNLPKKFS 61
Db 94 SFTFEEPIILCDSS--WDDDD-----NLLVCDVPILQLH---YR 126

Qy 62 IHPDQDKHVLV-DSGNLIIVP-DKNYIRPEIFFALASSLSASAEKSGPILLGVSKGEFC 119
Db 127 LRDEQKSLVSDPYELKALHLNGQINQOVIFSMFVQGEPSNDK-IPVALGLKGNLY 185

Qy 120 LYCDKDKGQSHPSLQKKEKMLAAQKESARRPFIFRAQVGSWMLESAAHPGWFCT 179
Db 186 LSCVMKDGDT--PTLQL--ESVDPKQYPKQKQKRFVFNKIEVSKVFESAEFPNWTST 241

Qy 180 SCNCNEPVGVTDKPFENKRIEFSPQV 206
Db 242 SQAEHKPVFLGNV-SGQIIDFTMESV 267

RESULT 12
1CHUB
Interleukin-1 beta precursor [validated] - human
N;Alternate names: hematopoietin-1; IL-1 beta
C;Species: Homo sapiens (man)
C;Date: 28-Feb-1986 #sequence_revision 15-May-1998 #text_change 09-Jul-2004
C;Accession: A25542; A29019; A94023; A93361; I51852; I65200; I38132; B27616; A01848; S1
R;Clark, B.D.; Collins, K.L.; Gandy, M.S.; Webb, A.C.; Auron, P.E.
Nucleic Acids Res. 14, 7897-7914, 1986
A;Title: Genomic sequence for human prointerleukin 1 beta: possible evolution from a rat interleukin 1 beta.
A;Reference number: A25542; MUID:87040762; PMID:3490654
A;Accession: A25542
A;Molecule type: DNA; mRNA
A;Residues: 1-5, 'K', 7-269 <CLA>
A;Cross-references: UNIPROT:P01584; GB:X04500; NID:g33788
A;Note: the mRNA sequence had codon AAG for 6-Lys, the DNA sequence had GAG for 6-Glu
R;Bensi, G.; Raugeli, G.; Palla, E.; Carinci, V.; Buonamassa, D.T.; Melli, M.
Gene 52, 95-101, 1987
A;Title: Human interleukin-1 beta gene.
A;Reference number: A29019; MUID:87248099; PMID:2954882
A;Accession: A29019
A;Molecule type: DNA
A;Residues: 1-269 <BEN>
A;Cross-references: GB:M15840; NID:g186281; PIDN:AAA74137.1; PID:g386816
R;Auron, P.E.; Webb, A.C.; Rosenwasser, L.J.; Mucci, S.F.; Rich, A.; Wolff, S.M.; Dina, Proc. Natl. Acad. Sci. U.S.A. 81, 7907-7911, 1984
A;Title: Nucleotide sequence of human monocyte interleukin 1 precursor cDNA.
A;Reference number: A94023; MUID:85088517; PMID:6083565
A;Accession: A94023
A;Molecule type: mRNA
A;Residues: 1-5, 'K', 7-269 <AUR>
A;Cross-references: GB:X02770; NID:g186268; PIDN:AAA36106.1; PID:g307043
R;March, C.J.; Mosley, B.; Larsen, A.; Cerretti, D.P.; Braedt, G.; Price, V.; Gillis, Nature 315, 641-647, 1985
A;Title: Cloning, sequence and expression of two distinct human interleukin-1 complementary DNAs.
A;Reference number: A93361; MUID:85240547; PMID:2989698
A;Accession: A93361
A;Molecule type: mRNA
A;Residues: 1-269 <MAR>
A;Cross-references: GB:X02532; NID:g33789; PIDN:CAA26372.1; PID:g33790
A;Note: parts of this sequence, including the amino end of the mature form, were confirmed by sequencing of the complementary DNA.
R;Webb, A.C.; Dinarello, C.A.; Rosenwasser, L.J.; Mucci, S.F.; Rich, A.; Wolff, S.M.; Adv. Gene Technol. 22, 339-340, 1985
A;Title: Nucleotide sequence of human monocyte interleukin 1 precursor cDNA.
A;Reference number: I51852
A;Accession: I51852
A;Status: translated from GB/EMBL/DBJ
A;Molecule type: mRNA

A;Residues: 1-5, 'K', 7-19, 'H', 21-110, 'Q', 112-176, 'A', 178-213, 'P', 215-269 <WEB>
A;Cross-references: GB:M54933; NID:G186287; PIDN:AAAS59136.1; PID:G186288
R;Nishida, T.; Nishino, N.; Takano, M.; Kawai, K.; Bando, K.; Masui, Y.; Nakai, S.; Hira
Biochem. Biophys. Res. Commun. 143, 345-352, 1987
A;Title: cDNA cloning of IL-1 alpha and IL-1 beta from mRNA of U937 cell line.
A;Reference number: I52217; MUID:87156769; PMID:3493774
A;Accession: I65200
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-269 <NTS>
A;Cross-references: GB:M15330; NID:G186283; PIDN:AAAS59135.1; PID:G307045
R;Kotenko, S.V.; Bulenikov, M.T.; Veiko, V.P.; Epishin, S.M.; Lomakin, I.B.; Emel'yanov,
I.; S.A.; Vinetskii, Y.P.
Dokl. Akad. Nauk SSSR 309, 1005-1008, 1989
A;Title: [Cloning of the cDNA coding for human prointerleukin-1 alpha and prointerleukin-1
beta].
A;Reference number: I38131; MUID:90249285; PMID:2635664
A;Accession: I38132
A;Status: translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-269 <KOT>
A;Cross-references: EMBL:X56087; NID:G35662; PIDN:CAA39567.1; PID:G35663
R;Zeebo, K.M.; Wpych, J.; Yuschenskoff, V.N.; Lu, H.; Hunt, P.; Dukes, P.P.; Langley, K.
Blood 71, 962-968, 1988
A;Title: Effects of hematopoietin-1 and interleukin 1 activities on early hematopoietic
A;Reference number: A90732; MUID:98184226; PMID:3281727
A;Accession: B27616
A;Molecule type: protein
A;Residues: 117-123, 'X', 125-126, 'X', 128 <ZSE>
R;Stevenson, F.T.; Bursien, S.B.; Fanton, C.; Lockesley, R.M.; Lovett, D.H.
Proc. Natl. Acad. Sci. U.S.A. 90, 7245-7249, 1993
A;Title: The 31-kDa precursor of interleukin 1alpha is myristoylated on specific lysines
A;Reference number: A48933; MUID:93348250; PMID:8346241
A;Contents: annotation; myristylation of lysines
R;Nanduri, V.B.; Humes, J.D.; Pan, Y.C.E.; Kilian, P.L.; Stern, A.S.
Biochim. Biophys. Acta 1118, 25-35, 1991
A;Title: The role of arginine residues in interleukin 1 receptor binding.
A;Reference number: S19608; MUID:92110334; PMID:1837236
A;Contents: annotation; type 1 IL-1 receptor interaction site
A;Note: modification of Arg-120 by phenylglyoxal blocks receptor binding
R;Clow, G.M.; Gronenborn, A.M.
submitted to the Brookhaven Protein Data Bank, January 1991
A;Reference number: A50049; PDB:611B
A;Contents: annotation; conformation by (13)C- and (1)H-NMR, residues 117-269
R;Clow, G.M.; Wingfield, P.T.; Gronenborn, A.M.
Biochemistry 30, 2315-2323, 1991
A;Title: High-resolution three-dimensional structure of interleukin 1beta in solution by
A;Reference number: A46755; MUID:91159409; PMID:2001363
A;Contents: annotation; (1)H-NMR structural determination
R;Hazuda, D.J.; Strickler, J.; Simon, P.; Young, P.R.
J. Biol. Chem. 266, 7081-7086, 1991
A;Title: Structure-function mapping of interleukin 1 precursors. Cleavage leads to a con
A;Reference number: A39774; MUID:91201363; PMID:2016316
A;Contents: annotation
R;Finzel, B.C.; Watenpaugh, K.D.; Einspahr, H.M.
submitted to the Brookhaven Protein Data Bank, December 1989
A;Reference number: A50016; PDB:111B
A;Contents: annotation; X-ray crystallography, 2.0 angstroms, residues 119-269
R;Finzel, B.C.; Clancy, L.L.; Holland, D.R.; Muchmore, S.W.; Watenpaugh, K.D.; Einspahr,
J. Mol. Biol. 209, 779-791, 1989
A;Title: Crystal structure of recombinant human interleukin-1beta at 2.0 angstrom resolu
A;Reference number: A44666; MUID:90064532; PMID:2585509
A;Contents: annotation; X-ray crystallography, 2.0 angstroms
C;Comment: This protein lacks a conventional signal sequence for protein export. Cleavag
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin-1a
C;Genetics:
A;Gene: GDB:IL1B
A;Cross-references: GDB:I20094; OMIM:147720
A;Map position: 2q13-2q21
A;Introns: 16/2; 33/3; 101/1; 156/1; 199/3
C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lipoprotein; lymphokine; macrophag
F;117-269/ product: interleukin-1 beta #status experimental <ILI>

F;76/Binding site: myristate (Iys) (covalent) (partial) #status experimental
F;123/Binding site: carbohydrate (Asn) (covalent) #status absent

Query Match 9.0%; Score 104.5; DB 1; Length 269;
Best Local Similarity 29.1%; Pred. No. 0.036;
Matches 43; Conservative 29; Mismatches 59; Indels 17; Gaps 9;

Qy 45 FVHTSPKVKNLNPKFSDIHDDKHVLVDPSG--NLIAVPDKNY-IRPEIFFALASSLSA 101
||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db 113 YVHADP-VRSLN---CTLRDSQQSLVM-SGPVELKALHLQGDMEQVVFSMFVGEE 167

Qy 102 SAEEKSGPILLGVSKGFCLYC--DKDQGSHPISLQKKELMKLAQAOKESARRPFIFYRA 159
||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db 168 SNDK-IPVALGLKEKNLYLCVLKODK----PTQL--BSVDPKNPYKKRMKRKFVFNKI 220

Qy 160 QVGSWNMLESAAHPGWFICTSCNCNEPV 187
||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db 221 EINKLEFESAQPNNWIIISTQAENMPV 248

RESULT 13
JC5646
interleukin-1 beta - horse
C/Species: Equus caballus (domestic horse)
C/Date: 28-Oct-1997 #sequence_revision 28-Oct-1997 #text_change 09-Jul-2004
C/Accession: JC5646
R/Kato, H.; Youn, H.Y.; Ohashi, T.; Watari, T.; Goitsuuka, R.; Tsujimoto, H.; Haesegawa,
Gene 177, 11-16, 1996
A/Title: Identification of an alternatively spliced transcript of equine interleukin-1
A/Reference number: JC5646; PMID:97080493; PMID:8921838
A/Molecule type: mRNA
A/Residues: 1-214 <KAT>
A/Cross-references: UNIPROT:Q28386; DDBJ:D42165; NID:g2463549; PIDN:BAA22528.1; PID:g24.
C/Comment: This protein mediates a variety of physiological response to infections and
synthesis by hepatocytes, and stimulation of chondrocytes and synovial cells to produce
C/Superfamily: Interleukin-1

Query Match 8.2%; Score 95; DB 2; Length 214;
Best Local Similarity 24.5%; Pred. No. 0.21;
Matches 36; Conservative 24; Mismatches 69; Indels 18; Gaps 5;

Qy 42 AMNFVHTSPKVKNLN-PKFSIHQDHKVLVDGSLNLIAPDKNYIRPEIFFALASSLS 100
||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db 64 AMSIIIVAVEKLXKIPVPCSQAFQDDLRLSLF-----SVIFEEVVFVCMVSFVOGE 111

Qy 101 ASAEKSGPILLGVSKGFCLYCDKDQGSHPISLQKKELMKLAQAOKESARRPFIFYRA 160
||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db 112 EETDK-IPVALGLKEKNLYLSCGMKDGK--PTQL--ETVDPNTYPKKRMKRKFVFNKME 166

Qy 161 VGSWNMLESAAHPGWFICTSCNCNEPV 187
||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db 167 IKGNVFEFASANYPNWIIISTQAESPV 193

RESULT 14
S34031
NR3 protein - yeast (Saccharomyces cerevisiae)
N/Alternate names: protein YBR1445; protein YBR205w
C/Species: Saccharomyces cerevisiae
C/Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C/Accession: S34031; S46077; S34928
R/Jacquet, M.
submitted to the EMBL Data Library, January 1993
A/Reference number: S34022
A/Accession: S34031
A/Molecule type: DNA
A/Residues: 1-404 <JAC>
A/Cross-references: UNIPROT:P38130; EMBL:Z21487; NID:g311665; PID:g311682
R/Bussereau, F.; Demolis, N.; Jacquet, M.; Malliet, L
submitted to the Protein Sequence Database, August 1994
A/Reference number: S46054
A/Accession: S46077

A;Molecule type: DNA
A;Residues: 1-404 <BUS>
A;Cross-references: EMBL:Z36074; NID:g536582; PID:g536583; MIPS:YBR205W
R;Bussereau, F.; Mallet, L.; Gaillon, L.; Jacquet, M.
Yeast 9, 797-806, 1993
A;Title: Yeast Sequencing Reports. A 12.8 kb segment, on the right arm of chromosome II
A;Reference number: S34925; MUID:93377417; PMID:8368014
A;Accession: S34928
A;Molecule type: DNA
A;Residues: 91-352 <BU2>
A;Cross-references: EMBL:Z21487
C;Genetics:
A;Gene: SGD:KTR3
A;Cross-references: SGD:S00000409; MIPS:YBR205W
A;Map position: 2R
C;Keywords: transmembrane protein
P:22-45/Domain: transmembrane #status predicted <TMM>

Query Match	7.8%;	Score 91;	DB 2;	Length 404;
Best Local Similarity	25.8%;	Pred. No. 1.1;		
Matches	36;	Conservative 20;	Mismatches 58;	Indels 44; Gaps 5;
Qy	61	SIHQDQHKVLVLDGSLNLIAPVDKNYIRPE-----	IPFALASLUSASAEGSGPIL	110
Db	2	SVH---HKKLMPKSAALLIRKYQIGIRSFGLIIVLSFLFMGSGRSPEVPIAQGTSVS	58	
Qy	111	LGVSKGSEFCYCDKDGQSHPSLQKIEKLMKLAQAQKESARRPPIFYRAQVGSNNMLSEA	170	
Db	59	RVASKDYLMPTDSKSGVVIHPVDGKKEGVMVTLARNS-----	DLNVLKSI	106
Qy	171	AHPGWFICTSCNCNPEVGVTDKFNKRKHIEFSF---	QP	205
Db	107	RH-----	VEDRFNNRYHYDVWVFLNDQP	128

RESULT 15

A30584
N;Alternate names: hematopoietin-1; IL-1 beta; lymphocyte proliferation potentiating factor
C;Species: *Oryctolagus cuniculus* (domestic rabbit)
C;Date: 25-May-1989 #sequence revision 22-Nov-1996 #text_change 09-Jul-2004
C;Accession: A27714; A30584; J00082; A32166
R;Mori, S.; Goto, K.; Ohkawara, S.; Maeda, S.; Shimada, K.; Yoshinaga, M.
Biochem. Biophys. Res. Commun. 150, 1237-1243, 1988
A;Title: Cloning and sequence analysis of a cDNA for lymphocyte proliferation potentiating factor
A;Reference number: A27714; MUID:88134238; PMID:2449207
A;Accession: A27714
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-268 <MOR>
A;Cross-references: UNIPROT:P14628
R;Cannon, J.G.; Clark, B.D.; Wingfield, P.; Schweissner, U.; Losberger, C.; Dinarello, C.
J. Immunol. 142, 2299-2306, 1989
A;Title: Rabbit IL-1. Cloning, expression, biological properties, and transcription during
A;Reference number: A30584; MUID:89176242; PMID:2784458
A;Accession: A30584
A;Molecule type: mRNA
A;Residues: 1-268 <CAN>
A;Cross-references: GB:M26295; NID:g516632; PIDN:AAA31373.1; PID:g516633
R;Young, P.R.; Sylvestre, D.
Protein Eng. 2, 545-551, 1989
A;Title: Cloning of rabbit interleukin-1 beta: differential evolution of IL-1 alpha and
A;Reference number: A94230; MUID:89315718; PMID:2787507
A;Accession: J00082
A;Molecule type: mRNA
A;Residues: 1-268 <YOU>
C;Comment: This protein lacks a conventional signal sequence for protein export. Cleavage
form of interleukin-1-beta, unlike interleukin 1-alpha, is inactive.
C;Comment: Interleukin-1-beta precursor is less heavily myristoylated than interleukin-1-
C;Superfamily: interleukin-1
C;Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen
C;Keywords: Product: interleukin-1 beta #status predicted <ILS>
C;Keywords: 117-268/

	Query Match	7.6%	Score 89;	DB 1;	Length 268;
	Best Local Similarity	25.9%;	Pred. No. 1;		
	Matches 36;	Conservative 24;	Mismatches 61;	Indels 18;	Gaps 5;
Qy	68	KVLVLDSGNLIAPVDKNIYIRPEIFALASSLSASAEKSGPILGVSGKGFCLYC--DKD	125		
		::	:::::	:: :: ::	
Db	142	KALHLNENL-----NQVVFSNSFVQGESNDK-IPVALGLRGKLYLSVWKDD	191		
		::	:::::	:: :: ::	
Qy	126	KGSHPSLQLKXKBLMKLAQKESARRPFIYRAQVGSWNLMESAHPGWFICTSCNCE	185		
		::	:::::	:: :: ::	
Db	192	K-----PTQL--ESVDENRYPKKMKWRKFVFNKIEIKLFEFAQPNWYISTQTEYM	245		
		::	:::::	:: :: ::	
Qy	186	PVGVTDKFENRKHIIFSQ	204		
		::	:::::	:: :: ::	
Db	246	PVFLGNNSGGDLIDFSME	264		
		::	:::::	:: :: ::	

Search completed: September 29, 2005, 11:17:35
Job time : 27.5 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: September 29, 2005, 11:03:38 ; Search time 107 Seconds

(without alignments)
1043.302 Million cell updates/sec

Title: US-10-695-195-4

Perfect score: 1165

Sequence: 1 MSFVGNSGVKMGSEDEK.....IEFSQPVCKAEMSPSEVSD 218

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : UniProt_03.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	1154	99.1	218	1 IL1F7 HUMAN	Q9nzh6 homo sapien
2	1100.5	94.5	219	2 Q7RU00	Q7ru00 homo sapien
3	229	19.7	157	2 Q7RTZ7	Q7rtz7 homo sapien
4	225.5	19.4	169	1 IL1F9 HUMAN	Q9nzh8 homo sapien
5	225.5	19.4	169	2 Q7RTZ9	Q7rtz9 homo sapien
6	209	17.9	158	1 IL1F6 HUMAN	Q9uha7 homo sapien
7	209	17.9	158	2 Q7RTZ8	Q7rtz8 homo sapien
8	209	17.9	183	1 IL1F8 MOUSE	Q9d6z6 mus musculu
9	190	16.3	134	2 Q6UVX7	Q6uvx7 homo sapien
10	189.5	16.3	156	1 IL1F5 MOUSE	Q9qy71 mus musculu
11	174.5	15.0	164	1 IL1F9 MOUSE	Q8r460 mus musculu
12	172.5	14.8	155	1 IL1F5 HUMAN	Q9ubh0 h interleuk
13	172.5	14.8	155	2 Q7RTZ6	Q7rtz6 homo sapien
14	171	14.7	160	1 IL1F6 MOUSE	Q9jla2 mus musculu
15	165.5	14.2	152	1 IL1FA MOUSE	Q8r459 mus musculu
16	161	13.8	159	2 Q8CGA1	Q8cga1 mus musculu
17	159	13.6	178	1 IL1X MOUSE	Q8wz1 h interleuk
18	156.5	13.4	152	1 IL1FA HUMAN	Q7rtz5 homo sapien
19	156.5	13.4	152	2 Q7RTZ5	Q7rtz5 homo sapien
20	152	13.0	174	1 IL1X BOVIN	P26890 oryctolagus
21	150.5	12.9	177	1 IL1X RABIT	Q9gmz4 tursiops tr
22	150	12.9	177	1 IL1X TURTR	Q73909 gallus gall
23	150	12.9	267	2 Q73909	Q7rtz4 homo sapien
24	149.5	12.8	159	2 Q7RTZ4	Q7rtz4 homo sapien
25	149.5	12.8	177	1 IL1X HUMAN	P19510 homo sapien
26	149	12.8	176	1 IL1X_CANFA	P9beh0 canis fami
27	148	12.7	177	2 Q866R8	Q866r8 macaca fasc
28	146.5	12.6	177	1 IL1X_PIG	Q29056 sus scrofa
29	145.5	12.5	272	2 Q9DDF2	Q9ddf2 cyprinus ca
30	144.5	12.4	178	1 IL1X RAT	P25086 rattus norv
31	142.5	12.2	272	2 Q8AXV9	Q8axv9 carassius a

32 140.5 12.1 273 2 Q7T056
33 137.5 11.8 177 1 IL1X HORSE
34 136.5 11.7 272 2 Q712J8
35 136 11.7 260 1 IL1B_ONCMY
36 136 11.7 280 2 Q8UUG3
37 136 11.7 272 2 Q9DDF3
38 135 11.6 276 2 Q5P18
39 135 11.6 276 2 Q5P18
40 133 11.4 260 2 Q6IWH5
41 128.5 11.0 238 2 Q8AXV8
42 127.5 10.9 82 2 Q6PUJ3
43 127.5 10.9 266 1 IL1B_SHEEP
44 122 10.5 267 2 Q29082
45 119.5 10.3 267 1 IL1B_PIG

ALIGNMENTS

RESULT 1

IL1F7 HUMAN STANDARD; Q8TD04; Q8TD05; Q9HBF2; Q9HBF3; Q9UHA6;
ID IL1F7 HUMAN PRT: 218 AA.
AC Q9NZH6; Q8TD04; Q8TD05; Q9HBF2; Q9HBF3; Q9UHA6;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Interleukin 1 family, member 7 precursor (IL-1F7) (Interleukin-1 zeta)
DE (IL-1 zeta) (FILL zeta) (Interleukin-1 homolog 4) (IL-1H4)
DE (Interleukin-1-related protein) (IL-1RPI) (IL-1X protein).
GN Name=IL1F7; Synonyms=FIL12, IL1H4, IL1RPI;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RS SEQUENCE FROM N.A. (ISOFORM B).
RP TISSUE=Fetal B-cell, Fetal colon, Fetal lung, and Fetal testis;
RC MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
RX Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
the interleukin-1 family.";
RL J. Biol. Chem. 275:10308-10314 (2000).
RN [2]
RS SEQUENCE FROM N.A. (ISOFORM B).
RP TISSUE=Colon carcinoma;
RX Manoj P.P., Mantovani A., Muzio M.;
RA Submitted (JUL-1999) to the EMBL/GenBank/DBJ databases.
RN [3]
RS SEQUENCE FROM N.A. (ISOFORMS B AND C), SEQUENCE OF 46-54, AND VARIANTS
VAL-31 AND ALA-42.
RP MEDLINE=21066552; PubMed=1145836; DOI=10.1006/cyto.2000.0799;
RX Pan G., Resser P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
RA Yansura D., Lewis L., Eigenbrot C., Hensel W.J., Vandlen R.;
RT "IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
1Rrp.";
RL Cytokine 13:1-7 (2001).
RN [4]
RS SEQUENCE FROM N.A. (ISOFORM A).
RP MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
RX Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M., Garka K.E.,
RA Sims J.E.;
RT "Four new members expand the IL-1 superfamily.";
RL J. Biol. Chem. 275:1169-1175 (2000).
RN [5]
RS SEQUENCE FROM N.A. (ISOFORMS D AND E).
RP MEDLINE=21988051; PubMed=11991723; DOI=10.1006/geno.2002.6752;
RX Taylor S.L., Renshaw B.R., Garka K.E., Smith D.E., Sims J.E.;
RT "Genomic organization of the interleukin-1 locus.";
RL Genomics 79:726-733 (2002).
RN [6]
RS SEQUENCE FROM N.A. (ISOFORM B), AND VARIANTS VAL-31 AND ALA-42.
RP

RC TISSUE=Placenta;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Datchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udén T.B., Tohiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahy J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -1- FUNCTION: Binds to interleukin-18 receptor (IL-18R) receptor but
not to IL-1 receptor. Could be a new player in the inflammatory
and immune responses mediated by the IL-18/IL-18R axis.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=5;
CC Name=B;
CC IsoId=Q9NZH6-1; Sequence=Displayed;
CC Name=A;
CC IsoId=Q9NZH6-2; Sequence=VSP_002653;
CC Name=C;
CC IsoId=Q9NZH6-3; Sequence=VSP_002656;
CC Name=D;
CC IsoId=Q9NZH6-4; Sequence=VSP_002654;
CC Name=E;
CC IsoId=Q9NZH6-5; Sequence=VSP_002655;
CC -1- TISSUE SPECIFICITY: Isoforms A, B and C are expressed in testis,
colon, placenta, lung and lymph node. Isoforms D and E were found
only in testis and bone marrow. Whereas only isoform C is found in
brain, only isoform B in kidney and only isoform C in heart.
CC -1- INDUCTION: By phorbol ester (PMA) in different cell lines.
CC -1- SIMILARITY: Belongs to the IL-1 family.

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or send an email to license@isb-sib.ch).

DR EMBL; AF200496; AAG69252.1; -
DR EMBL; AF167368; AAG29344.1; -
DR EMBL; AF251118; AAG14420.1; -
DR EMBL; AF251120; AAG14422.1; -
DR EMBL; AF251119; AAG14421.1; -
DR EMBL; AF201832; AAF25212.1; -
DR EMBL; AY071840; AAL67151.1; -
DR EMBL; AY071841; AAL67154.1; -
DR EMBL; BC020637; AAH20637.1; -
DR HSSP; P18510; 1ILR.
DR Genew; HGNC:15563; IL1F7.
DR H-InvdB; HIX0002387; -.
DR MIM; 605510; -.
DR GO; GO:0005576; C:extracellular; TAS.
DR GO; GO:0005149; F:Interleukin-1 receptor binding; NAS.
DR GO; GO:0006955; F:Immune response; NAS.
DR InterPro; IPR008996; Cytok IL1 like.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1_1.
DR PRINTS; PR00264; INTERLEUKIN1.

DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; FALSE NEG.
KW Alternative splicing; Cytokine; Direct protein sequencing;
KW Multigene family; Polymorphism.
FT PROPEP 1 45 Removed in mature form.
FT CHAIN 46 218 Interleukin 1 family member 7.
FT VARSPLIC 1 49 MSFVGENSGVGMGSEDEKDEPOCCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLPKKF 60
FT TMNFVHTS -> MSGCDRRETETKGNKSPFKRLRG (in
isoform A).
FT FTID=VSP_002653.
FT DPAGSPLEPGPSLPMTNFVHTS -> G (in isoform
D).
FT FTID=VSP_002654.
FT Missing (in isoform E).
FT FTID=VSP_002655.
FT SPVKVNLNPKKFSIHQQDHKVLVDLSDGNLIAPDKNIRPE
-> K (in isoform C).
FT FTID=VSP_002656.
FT G -> V.
FT FTID=VAR_014260.
FT T -> A.
FT FTID=VAR_014261.
FT SEQUENCE 218 AA; 24126 MM; 96E089310D2CEA68 CRC64;
Query Match 99.1%; Score 1154; DB 1; Length 218;
Best Local Similarity 99.1%; Pred. No. 6.2e-95;
Matches 216; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 MSFVGENSGVGMGSEDEKDEPOCCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLPKKF 60
DB 1 MSFVGENSGVGMGSEDEKDEPOCCLEDPAVSPLEPGPSLPAMNFVHTSPKVNLPKKF 60
QY 61 SIHQDHKVLVDLSDGNLIAPDKNIRPEIFFALASSLSASAESKSPILLGVSKGFCL 120
DB 61 SIHQDHKVLVDLSDGNLIAPDKNIRPEIFFALASSLSASAESKSPILLGVSKGFCL 120
QY 121 YCDKDGQSHPSLQKKEKLMKLAOKESARRPFIFYRAQVGSWNLMLESAHFGWFICT 180
DB 121 YCDKDGQSHPSLQKKEKLMKLAOKESARRPFIFYRAQVGSWNLMLESAHFGWFICT 180
QY 181 CNCNEPVGVTDFENRKHIEFSQPCKAEMSPSEVSD 218
DB 181 CNCNEPVGVTDFENRKHIEFSQPCKAEMSPSEVSD 218
RESULT 2
ID Q7RU00 PRELIMINARY; PRT; 219 AA.
AC Q7RU00;
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE IL-1F7b (IL-1H4, IL-1H, IL-1RP1).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RX MEDLINE=20545212; PubMed=11093146;
RX DOI=10.1002/1521-4141(200011)30:11<3299>3.0.CO;2-S;
RA Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.;
RA "A tissue specific IL-1 receptor antagonist homolog from the IL-1
cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";
RL Eur. J. Immunol. 30:3299-3308(2000).
RN [2]
RX SEQUENCE FROM N.A.
RX MEDLINE=97312693; PubMed=9169134; DOI=10.1006/geno.1997.4654;
RX Nothwang H.G., Strahm B., Denich D., Kuebler M., Schwabe J.,
RA Gingrich J.C., Jauch A., Cox A., Nicklin M.J.H., Kurnit D.M.,
RA Hildebrandt F.;
RT "Molecular cloning of the interleukin-1 gene cluster: construction of

an integrated YAC/PAC contig and a partial transcriptional map in the
 region of chromosome 2q13.;
 Genomics 41:370-378 (1997).
 [3]
 SEQUENCE FROM N.A.
 MEDLINE=94245215; PubMed=8188271;
 Nicklin M.J.H., Weith A., Duff G.W.;
 RA "A physical map of the region encompassing the human interleukin-1-
 alpha, interleukin-1-beta and interleukin-1 receptor genes.";
 Genomics 19:382-384 (1994).
 [4]
 SEQUENCE FROM N.A.
 MEDLINE=21988050; PubMed=11991722; DOI=10.1006/geno.2002.6751;
 Nicklin M.J.H., Barton J.L., Nguyen M., Fitzgerald M.G., Duff W.G.,
 RA Kornman K.;
 RA "A sequence-based map of the nine genes of the human interleukin-1
 cluster.";
 Genomics 79:718-725 (2002).
 [5]
 SEQUENCE FROM N.A.
 MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;
 Mulero J.J., Pace A.M., Nelken S.T., Loeb D.D., Correa T.R.,
 RA Drmanac R., Ford J.E.;
 RA "IL1HV1: A novel interleukin-1 receptor antagonist gene.";
 Biochem. Biophys. Res. Commun. 263:702-706 (1999).
 [6]
 SEQUENCE FROM N.A.
 MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
 Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M., Garka K.E.,
 RA Sims J.E.;
 RA "Four new members expand the interleukin-1 superfamily.";
 J. Biol. Chem. 275:1169-1175 (2000).
 [7]
 SEQUENCE FROM N.A.
 MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
 Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
 RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
 RA Young P.R.;
 RA "Identification and initial characterization of four novel members of
 the interleukin-1 family.";
 J. Biol. Chem. 275:10308-10314 (2000).
 [8]
 SEQUENCE FROM N.A.
 MEDLINE=20318623; PubMed=10860666; DOI=10.1006/geno.2000.6184;
 Bustfield S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
 RA Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
 RA "Identification and gene organization of three novel members of the
 IL-1 family on human chromosome 2.";
 Genomics 66:213-216 (2000).
 [9]
 SEQUENCE FROM N.A.
 MEDLINE=21066552; PubMed=11145836; DOI=10.1006/cyto.2000.0799;
 Pan G., Resser P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
 RA Vanaura D., Lewis L., Eigenbrot C., Hensel W.J., Vandlen R.;
 RA "IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
 1Rrp.";
 Cytokine 13:1-7 (2001).
 [10]
 SEQUENCE FROM N.A.
 MEDLINE=21282953; PubMed=11278614; DOI=10.1074/jbc.M010095200;
 Lin H.S., Ho A.S., Haley-Vicente D., Zhang J., Bernal-Fussell J.,
 RA Face A.M., Hansen D., Schweighofer K., Mize N.K., Ford J.E.;
 RA "Cloning and characterization of IL-1HY2, a novel interleukin-1 family
 member.";
 J. Biol. Chem. 276:20597-20602 (2001).
 [11]
 SEQUENCE FROM N.A.
 MEDLINE=21359532; PubMed=11466363;
 RA Debits R., Timans J.C., Homey B., Zurawski S., Sana T.R., Lo S.,
 RA Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
 RA Kastalein R.A.;
 RA "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
 as an antagonist and agonist of NF-kB activation through the orphan

IL-1 receptor-related protein 2.J. Immunol. 167: 1440-1446.";
 J. Immunol. 167:1440-1446 (2001).
 [12]
 SEQUENCE FROM N.A.
 MEDLINE=21459116; PubMed=11574262; DOI=10.1016/S1471-4906(01)02040-3;
 RA Sims J.E., Nicklin M.J., Bazan J.F., Barton J.L., Bustfield S.J.,
 RA Ford J.E., Kastelein R.A., Kumar S., Lin H., Mulero J.J., Pan G.,
 RA Pan Y., Smith D.E., Young P.R.;
 RA "A new nomenclature for the IL-1-family genes.";
 Trends Immunol. 22:536-537 (2001).
 CC -1- MISCELLANEOUS: The sequence shown here is derived from an
 EMBL/GenBank/DBJ third party annotation (TPA) entry.
 CC -1- SIMILARITY: Belongs to the IL-1 family.
 DR EMBL: BN000002; CAD29873.1; -.
 DR HSP: O90Y1.1; IMD6.
 DR GO: GO:0005576; C:extracellular; IEA.
 DR GO: GO:0005152; F:interleukin-1 receptor antagonist activity; IEA.
 DR GO: GO:0006955; P:immune response; IEA.
 DR InterPro: IPR008996; Cytok IL1 like.
 DR InterPro: IPR003297; InterleukinIL1RA.
 DR InterPro: IPR000975; Interleukin_1.
 DR Pfam: PF00340; IL1_1.
 DR PRINTS: PRO0264; INTERLEUKIN1.
 DR PRINTS: PRO1360; INTERLEUKIN1X.
 DR PRODOM: PD002536; Interleukin_1; 1.
 DR PRODOM: PD002536; Interleukin_1; 1.
 SQ SEQUENCE 219 AA; 24242 MW; 18EBA0881DF25C41 CRC64;
 Query Match 94.58; Score 1100.5; DB 2; Length 219;
 Best Local Similarity 96.3%; Pred. No. 3.7e-90;
 Matches 211; Conservative 2; Mismatches 5; Indels 1; Gaps 1;
 Qy 1 MSFVGENSGVKGSGDEWDEKDEPQCCLEDPVSPLEPGPSLPAMNFVHTSPKVNLPKCF 60
 Db 1 MSFVGENSGVKGSGDEWDEKDEPQCCLEDPVSPLEPGPSLPAMNFVHTSRKVNLPKCF 60
 Qy 61 SIHQDQKHVLVDSGNLIVDPKNYIRPEIFFALASSLSASAKGSPILLGVSKGEFCL 120
 Db 61 SIHQDQKHVLVDSGNLIVDPKNYIRPEIFFALASSLSASAKGSLILLGVSKGEFCL 120
 Qy 121 YCDKDKQSHPSLQKKELMKLAOKESARRPFIYRAQVGSNNMLESAAHPGWFICT 180
 Db 121 YCDKDKQSHPSLQKKELMKLAOKESARRPFIYRAQVGSNNMLESAAHPGWFICT 180
 Qy 181 CNCNEPVGVTDKFENRKHIEFSFOP-VCKAEMSPSEVSD 218
 Db 181 CNCNEPVGVTDKFENRKHIEFSFOPVVKAEKEMSPSEVSN 219
 RESULT 3
 Q7RTZ7 PRELIMINARY; PRT; 157 AA.
 ID Q7RTZ7
 AC Q7RTZ7; 01-MAR-2004 (TrEMBLrel. 26, Created)
 DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
 DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
 DE IL-1F8 (FTL1-eta).
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 ON NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20545212; PubMed=11093146;
 RX DOI=10.1002/1521-4141(200011)30:11<3299::AID-IMMU2299>3.0.CO;2-S;
 RA Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.;
 RA "A tissue specific IL-1 receptor antagonist homolog from the IL-1
 cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";
 Eur. J. Immunol. 30:3299-3308 (2000).
 RL [2]
 RN SEQUENCE FROM N.A.
 RP MEDLINE=97312693; PubMed=9169134; DOI=10.1006/geno.1997.4654;
 RA Nothwang H.G., Strahm B., Denich D., Kuebler M., Schwabe J.,
 RA Gingrich J.C., Jauch A., Cox A., Nicklin M.J.H., Kurnit D.M.,

the interleukin-1 family.";
J. Biol. Chem. 275:10308-10314 (2000).
[2]
SEQUENCE FROM N.A., AND CHARACTERIZATION.
TISSUE=Epithelium;
MEDLINE=21359532; PubMed=11466363; Zurawski S., Sana T.R., Lo S.,
Debets R., Timans J.C., Honey B., Zurawski S., Bazan J.F.,
Wagner J., Edwards G., Clifford T., Menon S.,
Kastelein R.A.;
"Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
as an antagonist and agonist of NF-kappa B activation through the
orphan IL-1 receptor-related protein 2";
J. Immunol. 167:1440-1446 (2001).
[3]
SEQUENCE FROM N.A.
MEDLINE=20318623; PubMed=10860666; DOI=10.1006/geno.2000.6184;
Busfield S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
"Identification and gene organization of three novel members of the
IL-1 family on human chromosome 2";
Genomics 66:213-216 (2000).
CC - FUNCTION: Function as an agonist of NF-kappa B activation through
the orphan IL-1 receptor-related protein 2. Could constitute part
of an independent signaling system analogous to interleukin-1
alpha (IL-1A), beta (IL-1B) receptor agonist and interleukin-1
receptor type I (IL-1RI), that is present in epithelial barriers
and takes part in local inflammatory response.
CC - SUBCELLULAR LOCATION: Secreted.
CC - TISSUE SPECIFICITY: Highly expressed in tissues containing
epithelial cells: skin, lung, stomach and esophagus. In skin is
expressed only in keratinocytes but not in fibroblasts,
endothelial cells or melanocytes. Up-regulated in lesional
psoriasis skin.
CC - INDUCTION: By TNF-alpha and by IFN-gamma in keratinocytes.
CC - SIMILARITY: Belongs to the IL-1 family.

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the European Bioinformatics Institute. There are no restrictions on its
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or send an email to license@sib-sib.ch).

EMBL; AF200492; AAF69248.1; -;
EMBL; AF206696; AAG35670.1; -;
DR HSSP; P18510; 1IL1R.
DR Genew; HGNC:15741; IL1P9.
DR MIM; 605542; -;
DR GO; GO:0007267; P:cell-cell signaling; TAS.
DR GO; GO:0009613; P:response to pest/pathogen/parasite; TAS.
DR InterPro; IPR008996; Cytok_IL1 like.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR PRINTS; PR00264; INTERLEUKIN.
DR Prodom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; FALSE_NEG.
KW Cytokine; Multigene family.
SQ SEQUENCE 169 AA; 18721 MW; F00A9243706F4154 CRC64;

Query Match 19.4%; Score 225.5; DB 1; Length 169;
Best Local Similarity 38.3%; Pred. No. 4e-12;
Matches 51; Conservative 26; Mismatches 51; Indels 5; Gaps 4;

QY 61 STHDQDKVLVDLSGNLIVAPDKNIRPEIFPALLSSLSASAE-KGSPILIGVSKGEFC 119
DB 26 TINDLNQQWTLQGNLWAVPRSDSVPTVAVITCKYPEALEQGRGPYILGIQNPWC 85
QY 120 LYCDKDKGQSHPSLQKKEKLMKLAQKESARRPFIFVYAAQVGSWNMLESAHPGWFTCT 179
DB 86 LYCEKVGEGQ--PTLQLKEQKINDLYGQPEPV-KPFLFYRAKTRGTSTLESVAPDPWFAT 142

QY 180 SCNCNRPVGVTDK 192
DB 143 S-KRQDPIILTSE 154

RESULT 5
Q7RT29 PRELIMINARY; PRT; 169 AA.
AC Q7RT29;
DT 01-MAR-2004 (T-EMBLrel. 26, Created)
DT 01-MAR-2004 (T-EMBLrel. 26, Last sequence update)
DE 01-MAR-2004 (T-EMBLrel. 26, Last annotation update)
DE IL-1P9 (IL-1RI, IL-1RP2, IL-1-epsilon).
GN Name=IL1P9;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20545212; PubMed=11093146;
RX DOI=10.1002/1521-4141(200011)30:11<3299::AID-IMMU3299>3.0.CO;2-S;
RA Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.;
"A tissue specific IL-1 receptor antagonist homolog from the IL-1
cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities";
Eur. J. Immunol. 30:3299-3308 (2000).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=9169134; DOI=10.1006/geno.1997.4654;
RX Notthwang H.G., Strahm B., Denich D., Kuebler M., Schwabe J.,
Gingrich J.C., Jauch A., Cox A., Nicklin M.J.H., Kurnit D.M.,
Hildebrandt F.;
"Molecular cloning of the interleukin-1 gene cluster: construction of
an integrated YAC/PAC contig and a partial transcriptional map in the
region of chromosome 2q13";
Genomics 41:370-378 (1997).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=94245215; PubMed=8188271;
RX Nicklin M.J.H., Weith A., Duff G.W.;
"A Physical map of the region encompassing the human interleukin-1-
alpha, interleukin-1-beta and interleukin-1 receptor genes";
Genomics 19:382-384 (1994).
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE=21988050; PubMed=11991722; DOI=10.1006/geno.2002.6751;
RX Nicklin M.J.H., Barton J.L., Nguyen M., Fitzgerald M.G., Duff W.G.,
Kornman K.;
"A sequence-based map of the nine genes of the human interleukin-1
cluster";
Genomics 79:718-725 (2002).
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;
RA Mulero J.J., Pace A.M., Nelken S.T., Loeb D.D., Correa T.R.,
Drmanac R., Ford J.E.;
"IL1HV1: A novel interleukin-1 receptor antagonist gene";
Biochem. Biophys. Res. Commun. 263:702-706 (1999).
RN [6]
RP SEQUENCE FROM N.A.
RX MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
RA Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M., Garka K.E.,
Sims J.E.;
"Four new members expand the interleukin-1 superfamily";
J. Biol. Chem. 275:1169-1175 (2000).
RN [7]
RP SEQUENCE FROM N.A.
RX MEDLINE=10744718; DOI=10.1074/jbc.275.14.10308;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
Young P.R.;
"Identification and initial characterization of four novel members of
the interleukin-1 family";

[illegible]

RX	MEDLINE=20318623; PubMed=108606666; DOI=10.1006/geno.2000.6184;
RA	Busfield S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
RA	Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.,
RT	"Identification and gene organization of three novel members of the
RT	IL-1 family on human chromosome 2.";
Genomics	66:213-216(2000).
RL	[9]
RP	SEQUENCE FROM N.A.
RX	MEDLINE=21066552; PubMed=11145936; DOI=10.1006/cyto.2000.0799;
RA	Pan G., Ribeser P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
RA	Yansura D., Lewis L., Eigenbrot C., Henzel W.J., Vandlen R.;
RA	"IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
RT	1RTP";
RT	Cytokine 13:1-7(2001).
RL	[10]
RP	SEQUENCE FROM N.A.
RX	MEDLINE=21282953; PubMed=11278614; DOI=10.1074/jbc.M010095200;
RA	Lin H.S., Ho A.S., Haley-Vicente D., Zhang J., Bernal-Fussell J.,
RA	Pace A.M., Hansen D., Schweighofer K., Mize N.K., Ford J.E.;
RT	"Cloning and characterization of IL-1HY2, a novel interleukin-1 family
RT	member.";
RT	J. Biol. Chem. 276:20597-20602(2001).
RL	[11]
RP	SEQUENCE FROM N.A.
RX	MEDLINE=21359532; PubMed=11466363;
RA	Debeurs R., Timans J.C., Homey B., Zurawski S., Sana T.R., Lo S.,
RA	Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
RA	Kastelein R.A.;
RA	"Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
RT	as an antagonist and agonist of NF-kB activation through the orphan
RT	IL-1 receptor-related protein 2.J. Immunol. 167: 1440-1446.";
RT	J. Immunol. 167:1440-1446(2001).
RL	[12]
RP	SEQUENCE FROM N.A.
RX	MEDLINE=21459116; PubMed=11574262; DOI=10.1016/S1471-4906(01)02040-3;
RA	Sims J.E., Nicklin M.J., Bazan J.F., Barton J.L., Busfield S.J.,
RA	Ford J.E., Kastelein R.A., Kumar S., Lin H., Mulero J.J., Pan G.,
RA	Pan Y., Smith D.E., Young P.R.;
RT	"A new nomenclature for the IL-1-family genes.";
RT	Trends Immunol. 22:536-537(2001).
CC	-1- MISCELLANEOUS: The sequence shown here is derived from an
CC	EMBL/GenBank/DBJ third party annotation (TPA) entry.
CC	-1- SIMILARITY: Belongs to the IL-1 family.
CC	EMBL; BN000002; CAD29875.1; -.
DR	HSSP; Q9QYI1; 1MD6.
DR	GO; GO:0005576; C:extracellular; IEA.
DR	GO; GO:0005149; F:interleukin-1 receptor binding; IEA.
DR	GO; GO:0006955; P:immune response; IEA.
DR	GO; GO:0006954; P:inflammatory response; IEA.
DR	InterPro; IPRO08996; Cytok IL1_like.
DR	InterPro; IPRO03294; InterleukinIL1AB.
DR	InterPro; IPRO03296; InterleukinIL1B.
DR	InterPro; IPRO00975; Interleukin_1.
DR	Pfam; PF00340; IL1; 1.
DR	PRINTS; PR00264; INTERLEUKIN1.
DR	PRINTS; PR01359; INTRLEUKIN1B.
DR	PRINTS; PR01357; INTRLEUKIN1AB.
DR	ProDom; PD002536; Interleukin_1; 1.
DR	SEQUENCE 158 AA; 17684 MW; 469AC84306B0E280 CRC64;
SQL	
Query Match	17.9%; Score 209; DB 2; Length 158;
Best Local Similarity	36.7%; Pred. No. 1.le-10;
Matches	54; Conservative 26; Mismatches 61; Indels 6; Gaps 4
QY	57 PKKFSIHDPKHVLVDGNIIVAPDKNYIRPEIFFALAS--SLSSASAEGKSPILLGV 114
DB	10 PQGSIQIDINHRVWVLDQDTLIAVPRKDRMSP-VTIALISCRHVETLEKDRGNPIYGLN 68
QY	115 KGEFCLYCDKDGQSHPSLQKKKEKLMKLAQKESARRPFIFYRAQVGSWNLESAAHPG 174
DB	69 GLNLCLMCAKVGQD--PTLQLKEKIDIMLYNQPEPV-KSFLFYHQSQRNSTFESVAFPG 125
QY	175 WFICTSCNCNEPVGVTDFENRKHIEF 201

RESULT 7
Q7RTZ8 PRELIMINARY; PRT; 158 AA.
ID Q7RTZ8
AC Q7RTZ8;
DT 01-WAR-2004 (TREMBLrel. 26, Created)
DT 01-WAR-2004 (TREMBLrel. 26, Last sequence update)
DT 01-WAR-2004 (TREMBLrel. 26, Last annotation update)
DE IL-1F6 (FIL-1-epsilon).
DE IL-1F6 (FIL-1-epsilon).
GN Name=IL1F6;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;
RN [1]
RN SEQUENCE FROM N.A.
RP MEDLINE=20345212; PubMed=11093146;
RX DOI=10.1002/1521-4141(200111)30:11<3299::AID-IMMU3299>3.0.CO;2-S;
RA Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.;
RA "A tissue specific IL-1 receptor antagonist homolog from the IL-1
RT cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";
RL Eur. J. Immunol. 30:3299-3308(2000).
RN [2]
RN SEQUENCE FROM N.A.
RP MEDLINE=97312693; PubMed=9169134; DOI=10.1006/geno.1997.4654;
RX Northwang H.G., Strahm B., Denich D., Kuebler M., Schwabe J.,
RA Gingrich J.C., Jauch A., Cox A., Nicklin M.J.H., Kurnit D.M.,
RA Hildebrandt F.;
RT "Molecular cloning of the interleukin-1 gene cluster: construction of
RT an integrated YAC/PAC contig and a partial transcriptional map in the
RT region of chromosome 2q13.";
RL Genomics 41:370-378(1997).
RN [3]
RN SEQUENCE FROM N.A.
RP MEDLINE=94245215; PubMed=8188271;
RX Nicklin M.J.H., Weith A., Duff G.W.;
RA "A Physical map of the region encompassing the human interleukin-1-
RT alpha, interleukin-1-beta and interleukin-1 receptor genes.";
RL Genomics 19:382-384(1994).
RN [4]
RN SEQUENCE FROM N.A.
RP MEDLINE=20092888; PubMed=11991722; DOI=10.1006/geno.2002.6751;
RX Nicklin M.J.H., Barton J.L., Nguyen M., Fitzgerald M.G., Duff W.G.,
RA Kornman K.;
RA "A sequence-based map of the nine genes of the human interleukin-1
RT cluster.";
RL Genomics 79:718-725(2002).
RN [5]
RN SEQUENCE FROM N.A.
RP MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;
RX Mulero J.J., Pace A.M., Nelken S.T., Loeb D.D., Correa T.R.,
RA Drmanac R., Ford J.E.;
RT "IL1HV1: A novel interleukin-1 receptor antagonist gene.";
RL Biochem. Biophys. Res. Commun. 263:702-706(1999).
RN [6]
RN SEQUENCE FROM N.A.
RP MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
RX Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M., Garka K.E.,
RA Sims J.E.;
RT "Four new members expand the interleukin-1 superfamily.";
RL J. Biol. Chem. 275:1169-1175(2000).
RN [7]
RN SEQUENCE FROM N.A.
RP MEDLINE=2009405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
RX Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
RT the interleukin-1 family.";
RL J. Biol. Chem. 275:10308-10314(2000).
RN [8]
RN SEQUENCE FROM N.A.

```
Db      ||| | | : : : : |
126 WFAVSEGGCPLLTQELGKANTDF 152

RESULT 8
ILF8_MOUSE
ID       ILF8_MOUSE          STANDARD;          PRT;    183 AA.
AC       Q9D6Z6; Q8R461;
DT       28-FEB-2003 (Rel. 41, Created)
DT       28-FEB-2003 (Rel. 41, Last sequence update)
DT       05-JUL-2004 (Rel. 44, Last annotation update)
DE       Interleukin 1 family member 8 (Il-1f8).
GN       Name=Il1f8; Synonyms=Filfe;
OS       Mus musculus (Mouse).
OC       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OX       Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OC       NCBI_TaxID=10090;
RN       [1]
RP       SEQUENCE FROM N.A.
RC       STRAIN=Swiss Webster / NIH;
RX       MEDLINE=21989051; PubMed=11991723; DOI=10.1006/geno.2002.6752;
RA       Taylor S.L., Renshaw B.R., Garka K.E., Smith D.E., Sims J.E.;
RT       "Genomic organisation of the interleukin-1 locus."
RL       Genomics 79:726-733 (2002).
[2]
RP       SEQUENCE FROM N.A.
RC       STRAIN=C57BL/6J; TISSUE=Tongue;
RX       MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
RA       Okazaki I., Furuno M., Kasukawa T., Adachi H., Bono H., Kondo S.,
RA       Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA       Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA       Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA       Schriml L.M., Kanapin A., Mateuda H., Batalov S., Beisel K.W.,
RA       Blake J.A., Bradt D., Brusic V., Choithia C., Corbani L.E., Cousins S.,
RA       Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
RA       Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA       Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA       Kanai A., Kawaji H., Kawasaki Y., Kedziarski R.M., King B.L.,
RA       Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA       Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA       Nagashima T., Numata K., Okido T., Pavan W.J., Portea G., Pesole G.,
RA       Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA       Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA       Sandelin A., Schneider C., Sample C.A., Setou M., Shimada K.,
RA       Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tonita M.,
RA       Verardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C.,
RA       Wilming L.G., Wynshaw-Boris A., Yangisawa M., Yang L., Yang L.,
RA       Yuan Z., Zhivalon M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA       Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA       Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA       Hara A., Haehizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA       Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA       Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA       Birney E., Hayashizaki Y.;
RT       "Analysis of the mouse transcriptome based on functional annotation of
RL       60,770 full-length cDNAs";
RE       Nature 420:563-573 (2002).
CC       -1- SUBCELLULAR LOCATION: Secreted (Potential).
CC       -1- SIMILARITY: Belongs to the IL-1 family.
-----
CC       This SWISS-PROT entry is copyright. It is produced through a collaboration
CC       between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC       the European Bioinformatics Institute. There are no restrictions on its
CC       use by non-profit institutions as long as its content is in no way
CC       modified and this statement is not removed. Usage by and for commercial
CC       entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC       or send an email to license@sb-sib.ch).
-----
DR       EMBL; AK0071842; AAC67152.1; ALT_INIT.
DR       EMBL; AK0079877; BAB26505.1; -.
DR       HSSP; P01584; 1L2H.
DR       MGPI; 1916927; 1I1f8.
DR       InterPro; IPRO08996; CytoC Il1 like.
```


QY 105 KGSPILLGVSKGEFLCDKDGKQSHPSLQKKKLMKLAQKESARRPFIFYRAQVGSW 164
 Db 36 RGDPIYLGIQNPENCLCEKVGEGQ--PTLQKKEQINDLYQDPPV-KPFLFYRAKTGRT 92
 QY 165 NMLESAAHPGWFICTSCNCPNPGVGTDK 192
 Db 93 STLESVAFPDWFIASS-KRDQPIILTSE 119

RESULT 10
 IL1F5 MOUSE STANDARD; PRT; 156 AA.
 AC O9QY4; O9JIG2;
 DT 28-FEB-2003 (Rel. 41, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)
 DT 25-OCT-2004 (Rel. 45, Last annotation update)
 DE Interleukin 1 family member 5 (IL-1F5) (interleukin-1 delta) (IL-1
 DE delta) (interleukin-1-like protein-1) (interleukin-1-like protein 1)
 DE (IL-1L1) (interleukin-1 HV1) (IL-1HV1) (interleukin-1 homolog 3) (IL-
 DE 1H3)
 GN Name=IL1F5; Synonyms=Fl1ld, Il1h3, Il1hy1;
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A. PubMed=11466363;
 RX MEDLINE=21359532; PubMed=11466363;
 RA Debets R., Timans J.C., Honey B., Zurawski S., Sana T.R., Lo S.,
 RA Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
 RA Kastelein R.A.
 RA "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
 RA as an antagonist and agonist of NF-kappa B activation through the
 RA orphan IL-1 receptor-related protein 2";
 RL J. Immunol. 167:1440-1446(2001).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20545212; PubMed=11093146;
 RX DOI=10.1002/1521-4141(200011)30:11<3299::AID-IMMUR299-3.0.CO;2-S;
 RA Barton J.L., Herbst R., Bosio S.D., Higgins L., Nicklin M.J.H.;
 RA "A tissue specific IL-1 receptor antagonist homolog from the IL-1
 RA cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";
 RL Eur. J. Immunol. 30:3299-3308(2000).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
 RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
 RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
 RA Young P.R.;
 RA "Identification and initial characterization of four novel members of
 RA the interleukin-1 family";
 RL J. Biol. Chem. 275:10308-10314 (2000).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Stomach, and Tongue;
 RX MEDLINE=23354683; PubMed=12466851; DOI=10.1038/nature01266;
 RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
 RA Nikaide I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
 RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
 RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.W.,
 RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
 RA Blake J.A., Bradt D., Bruscia V., Chothia C., Corbani L.E., Cousins S.,
 RA Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
 RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
 RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
 RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
 RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
 RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
 RA Nagashima T., Nunata K., Okido T., Pavan W.J., Perlea G., Pesole G.,
 RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
 RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
 RA Sandelin A., Schneider C., Sempke C.A., Setou M., Shimada K.,
 RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,

RA Verardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C.,
 RA Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
 RA Yuan Z., Zavalan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
 RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
 RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
 RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
 RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
 RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
 RA Birney E., Hayashizaki Y.;
 RT "Analysis of the mouse transcriptome based on functional annotation of
 RT 60,770 full-length cDNAs";
 RT Nature 420:563-573(2002).
 CC -1- FUNCTION: Is a highly and a specific antagonist of the IL-1
 CC receptor-related protein 2-mediated response to interleukin 1
 CC family member 9 (IL1F9). Could constitute part of an independent
 CC signaling system analogous to interleukin-1 alpha (IL-1A), beta
 CC (IL-1B) receptor agonist and interleukin-1 receptor type I (IL-
 CC 1RI), that is present in epithelial barriers and takes part in
 CC local inflammatory response (By similarity).
 CC -1- SUBCELLULAR LOCATION: Secreted (By similarity).
 CC -1- TISSUE SPECIFICITY: Highly abundant in embryonic tissue and
 CC tissues containing epithelial cells.
 CC -1- SIMILARITY: Belongs to the IL-1 family.
 CC
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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 CC or send an email to license@sib-sib.ch).
 CC
 CC EMBL; AF230378; AAF91275.1; -
 CC EMBL; AK009741; BAB26471.1; -
 CC EMBL; AK008977; BAB26002.1; -
 CC EMBL; AF250429; CAB59831.1; ALT_INIT.
 CC EMBL; AF200495; AAF69251.1; -
 CC PDB; 1MD6; X-ray; A=3-156.
 CC MGD; MGI:1859325; Il1f5.
 CC InterPro; IPR008996; Cytok IL1 like.
 CC InterPro; IPR000975; Interleukin_1.
 CC Pfam; PF00340; IL1; 1.
 CC PRINTS; PR00264; INTERLEUKIN1.
 CC ProDom; PD02536; Interleukin_1.
 CC SMART; SM00125; IL1; 1.
 CC PROSITE; PS00253; INTERLEUKIN_1; 1.
 CC 3D-structure; Cytokine; Multigene family.
 CC CONFLICT 2 2 Missing (in Ref. 3).
 FT SEQUENCE 156 AA; 17136 MW; A4D1BE2F93CF77A7 CRC64;
 SQ
 Query Match 16.3%; Score 189.5; DB 1; Length 156;
 Best Local Similarity 37.3%; Pred. No. 5.9e-09;
 Matches 50; Conservative 23; Mismatches 50; Indels 11; Gaps 5;
 QY 60 FSIHQDHQKVLVDLSDGNLIA--VPDKYVIRPEIFALASSLSASAEGKSPILGVSKGE 117
 Db 10 FRMKDSALKVLYLHNNQLLAGLHAQKVIKGEISVVPNRALDASL---SPVLGVQGS 66
 QY 118 FCLYCDKDKGSHPSLQKKKLMKLAQKESARRPFIFYRAQVGSNMLESAAHPGWF 176
 Db 67 QCLSCGTEKG---FILKLEPNIMELYLGAKES--KSFTFYRDMGLTSPSESAAIPGW 121
 QY 177 ICTSCNCPNPGVGT 190
 Db 122 LCTSPDAPQPVRLT 135

RESULT 11
 IL1F9 MOUSE STANDARD; PRT; 164 AA.
 ID IL1F9_MOUSE
 AC Q8R460;
 DT 28-FEB-2003 (Rel. 41, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)

GN Name=IL1P5; Synonyms=PII1D, IL1HY1, IL1L1, IL1RP3;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 NCBI_TaxID=9606;
 [1]
 RN SEQUENCE FROM N.A.
 RP
 RC TISSUE=Placenta;
 RC MEDLINE=20092888; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;
 RX Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M. M., Garika K.E.,
 RA Sims J.E.;
 RT "Four new members expand the IL-1 superfamily.";
 RL J. Biol. Chem. 275:1169-1175(2000).
 [2]
 RN SEQUENCE FROM N.A.
 RP
 RC TISSUE=Fetal skin;
 RC MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;
 RX Mulero J.J., Pace A.M., Nelken S.T., Loeb D.B., Correa T.R.,
 RA Drmanac R., Ford J.E.;
 RT "IL1R1, a novel interleukin-1 receptor antagonist gene.";
 RL Biochem. Biophys. Res. Commun. 263:702-706(1999).
 [3]
 RN SEQUENCE FROM N.A.
 RP
 RC TISSUE=Placenta;
 RC MEDLINE=20545212; PubMed=11093146;
 RX DOI=10.1002/1521-4141(200011)30:11<3299::AID-IMMU3299>3.0.CO;2-S;
 RX Barton J.L., Herbst R., Bosisio D., Higgins L., Nicklin M.J.H.;
 RT "A tissue specific IL-1 receptor antagonist homolog from the IL-1
 RT cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";
 RL Eur. J. Immunol. 30:3299-3308(2000).
 [4]
 RN SEQUENCE FROM N.A.
 RP
 RC MEDLINE=21359532; PubMed=11466363;
 RX Debets R., Timans J.C., Homey B., Zurawski S., Sana T.R., Lo S.,
 RA Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
 RA Kastlein R.A.;
 RT "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
 RT as an antagonist and agonist of NF-kappa B activation through the
 RT orphan IL-1 receptor-related protein 2.";
 RL J. Immunol. 167:1440-1446(2001).
 [5]
 RN SEQUENCE FROM N.A.
 RP
 RC MEDLINE=2018623; PubMed=10860666; DOI=10.1006/geno.2000.6184;
 RX Busfield S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
 RA Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
 RT "Identification and gene organization of three novel members of the
 RT IL-1 family on human chromosome 2.";
 RL Genomics 66:213-216(2000).
 [6]
 RN SEQUENCE FROM N.A.
 RP
 RC MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;
 RA Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J.,
 RA Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,
 RA Eaton D., Foster J., Grimaldi C., Gu Q., Hass P.E., Heldens S.,
 RA Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
 RA Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J.,
 RA Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A.,
 RA Vandlen R., Watanabe C., Wisand D., Woods K., Xie M.-H., Yanaura D.,
 RA Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.,
 RA Godowski P., Gray A.;
 RT "The secreted protein discovery initiative (SPDI), a large-scale
 RT effort to identify novel human secreted and transmembrane proteins: a
 RT bioinformatics assessment.";
 RL Genome Res. 13:2265-2270(2003).
 [7]
 RN SEQUENCE FROM N.A.
 RP
 RC TISSUE=Placenta;
 RC MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Db 53 SLSPVLGVGGSGQLSC--GVGQ-EPTLLEPVMIMELYLGAKES--KSFTFYRDMGL 101

Qy 164 WNMLESAAHFGWFICTSCNCPNEPVGVTDKPEN 195
: |||: |||: || : |||: |||: ||

Db 108 TSSPESAAYPGWFLCTVPEADQPVRLTQLPEN 139

RESULT 13

Q7RTZ6 PRELIMINARY; PRT; 155 AA.

AC Q7RTZ6;

DT 01-MAR-2004 (TrEMBLrel. 26, Created)

DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)

DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)

DE IL-1F5 (IL-1RH1, FcIL1-delta, IL-1RP3, IL-1b1, IL-1delta).

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

OX NCBI_TaxID=9606;

RN [1]

RN MEDLINE=20545212; PubMed=11093146;

RX DOI=10.1002/1521-4141(200111)30:11<3299::AID-IMMU3299>3.0.CO;2-S;

RA Barton J.L., Herbst R., Bosio D., Higgins L., Nicklin M.J.;

RA "A tissue specific IL-1 receptor antagonist homolog from the IL-1

RT cluster lacks IL-1, IL-1ra, IL-18 and IL-18 antagonist activities.";

RL Eur. J. Immunol. 30:3299-3308(2000).

RN [2]

RN MEDLINE=97312693; PubMed=9169134; DOI=10.1006/geno.1997.4654;

RX Northw H.G., Strahm B., Denich D., Kuebler M., Schwabe J.M.,

RA Gingrich J.C., Jauch A., Cox A., Nicklin M.J.H., Kurnit D.J.,

RA Hildebrandt F.;

RA "Molecular cloning of the interleukin-1 gene cluster: construction of

RT an integrated YAC/pAC contig and a partial transcriptional map in the

RL region of chromosome 2q13.";

RL Genomics 41:370-378(1997).

RN [3]

RN MEDLINE=94245215; PubMed=8188271;

RX Nicklin M.J.H., Weith A., Duff G.W.;

RA "A Physical map of the region encompassing the human interleukin-1-

RT alpha, interleukin-1-beta and interleukin-1 receptor genes.";

RL Genomics 19:382-384(1994).

RN [4]

RN MEDLINE=11991722; DOI=10.1006/geno.2002.6751;

RX Nicklin M.J.H., Barton J.L., Nguyen M., Fitzgerald M.G., Duff W.G.,

RA Korman K.;

RA "A sequence-based map of the nine genes of the human interleukin-1

RT cluster.";

RL Genomics 79:718-725(2002).

RN [5]

RN MEDLINE=99443727; PubMed=10512743; DOI=10.1006/bbrc.1999.1440;

RX Mulero J.J., Pace A.M., Nelken S.T., Loeb D.D., Correa T.R.,

RA Drmanac R., Ford J.E.;

RT "IL1H1: A novel interleukin-1 receptor antagonist gene.";

RL Biochem. Biophys. Res. Commun. 263:702-706(1999).

RN [6]

RN MEDLINE=20092886; PubMed=10625660; DOI=10.1074/jbc.275.2.1169;

RX Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M., Garika K.E.,

RA Sime J.E.;

RT "Four new members expand the interleukin-1 superfamily.";

RL J. Biol. Chem. 275:1169-1175(2000).

RN [7]

RN MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;

RX Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,

RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,

RA Young P.R.;

RT "Identification and initial characterization of four novel members of

RT the interleukin-1 family.";
RL J. Biol. Chem. 275:10308-10314 (2000).
RN [8]
RP SEQUENCE FROM N.A.
RX MEDLINE=20318623; PubMed=10860666; DOI=10.1006/geno.2000.6184;
RA Busfield S.J., Comrack C.A., Yu G., Chickering T.W., Smutko J.S.,
RA Zhou H., Leiby K.R., Holmgren L.M., Gearing D.P., Pan Y.;
RT "Identification and gene organization of three novel members of the
RT IL-1 family on human chromosome 2.";
RL Genomics 66:213-216 (2000).
RN [9]
RP SEQUENCE FROM N.A.
RX MEDLINE=21066552; PubMed=11145836; DOI=10.1006/cyto.2000.0799;
RA Pan G., Risser P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
RA Yansura D., Lewis L., Eigenbrodt C., Henzel W.J., Vanden R.;
RT "IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
RT 1Rp.";
RL Cytokine 13:1-7 (2001).
RN [10]
RP SEQUENCE FROM N.A.
RX MEDLINE=21282953; PubMed=11278614; DOI=10.1074/jbc.M010095200;
RA Lin H.S., Ho A.S., Haley-Vicente D., Zhang J., Bernal-Pussel J.,
RA Pace A.M., Hansen D., Schweighofer K., Mize N.K., Ford J.E.;
RT "Cloning and characterization of IL-1H2, a novel interleukin-1 family
RT member.";
RL J. Biol. Chem. 276:20597-20602 (2001).
RN [11]
RP SEQUENCE FROM N.A.
RX MEDLINE=21359532; PubMed=11466363;
RA Debeets R., Timans J.C., Honey B., Zurawski S., Sana T.R., Lo S.,
RA Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
RA Kastelein R.A.;
RT "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
RT as an antagonist and agonist of NF-kB activation through the orphan
RT IL-1 receptor-related protein 2.J. Immunol. 167: 1440-1446.";
RL J. Immunol. 167:1440-1446 (2001).
RN [12]
RP SEQUENCE FROM N.A.
RX MEDLINE=21459116; PubMed=11574262; DOI=10.1016/S1471-4906(01)02040-3;
RA Sims J.E., Nicklin M.J., Bazan J.F., Barton J.L., Busfield S.J.,
RA Ford J.E., Kastelein R.A., Kumar S., Lin H., Mulero J.J., Pan G.,
RA Pan Y., Smith D.E., Young P.R.;
RT "A new nomenclature for the IL-1 family genes.";
RT Trends Immunol. 22:536-537 (2001).
RL ENBL/GenBank/DBJ third party annotation (TPA) entry.
CC -1- MTSCELLANEOS. The sequence shown here is derived from an
CC ENBL/GenBank/DBJ third party annotation (TPA) entry.
CC -1- SIMILARITY: Belongs to the IL-1 family.
CC DR ENBL; BN000002; CAD29877.1; -.
CC DR HSP; Q9QYI; 1MD6.
CC DR GO; GO:0005576; C:extracellular; IEA.
CC DR GO; GO:0005152; F:interleukin-1 receptor antagonist activity; IEA.
CC DR GO; GO:0006955; P:immune response; IEA.
CC DR GO; GO:0006954; P:inflammatory response; IEA.
CC DR InterPro; IPR008996; Cytok IL1 like.
CC DR InterPro; IPR003296; InterleukinIL1B.
CC DR InterPro; IPR003297; InterleukinIL1RA.
CC DR InterPro; IPR000975; Interleukin_1.
CC DR Pfam; PF00340; IL1; 1
CC DR PRINTS; PRO0264; INTERLEUKIN1.
CC DR PRINTS; PRO1359; INTERLEUKIN1B.
CC DR PRINTS; PRO1360; INTERLEUKIN1X.
CC DR PRODOM; PD002536; Interleukin_1; 1.
CC DR PROSITE; PS00253; INTERLEUKIN_1; UNKNOWN 1.
CC SEQUENCE 155 AA; 16962 MW; B96D85EFA2612E25 CRC64;
Query Match 14.8%; Score 172.5; DB 2; Length 155;
Best Local Similarity 33.6%; Pred. No. 1.9e-07;
Matches 51; Conservative 17; Mismatches 47; Gaps 6;
QY 60 FSIHQDKVLVLSGNLIVPDKNYIRPEIFFALASSLSASAEK6;----- 106
DB 9 FRMKDSALKVLYLHNQL-----LAGLHAGKVIKGBEISVVPNRWIDA 52

QY 107 --SPILLGVSKGEFLCYCDKQSHPSQLQKKEKLMKL-AAQKESARRPFIFYRAQVGS 163
DB 53 SLSPVILGVGGGSQLSC--GVGQ-EPTLTLEPVMIMELYLGAKES--KSFTFYRDMGL 107
[8]
QY 164 KMWLESAAPGPGFICTSCNCPNPGVGTDFEN 195
DB 108 TSSFESAAIPGWFCLCTVPADQVRLTQLPEN 139
[9]
RESULT 14
ID IL1F6_MOUSE STANDARD; PRT; 160 AA.
AC Q9JLA2;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Interleukin 1 family member 6 (IL-1F6) (Interleukin-1 epsilon) (IL-1
DE epsilon) (FILL epsilon) (Interleukin-1 homolog 1) (IL-1H1).
DE Names=Il1f6; Synonyms=Fillie, Il1e, Il1h1;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20209405; PubMed=10744718; DOI=10.1074/jbc.275.14.10308;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
RT the interleukin-1 family.";
RL J. Biol. Chem. 275:10308-10314 (2000).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=21359532; PubMed=11466363;
RA Debeets R., Timans J.C., Honey B., Zurawski S., Sana T.R., Lo S.,
RA Wagner J., Edwards G., Clifford T., Menon S., Bazan J.F.,
RA Kastelein R.A.;
RT "Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function
RT as an antagonist and agonist of NF-kappa B activation through the
RT orphan IL-1 receptor-related protein 2.";
RL J. Immunol. 167:1440-1446 (2001).
RN [3]
RP SEQUENCE FROM N.A.
RX STRAIN=C57BL/6J; TISSUE=Embryo;
RX MEDLINE=22354683; PubMed=124566851; DOI=10.1038/nature01266;
RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Schonbach C., Gojobori T.,
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer J.S.,
RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA Ravasi T., Reed J.C., Reid D.J., Ring B.Z., Ringwald M.,
RA Sandelin A., Schneider C., Semple C.A., Setou M., Shimada M.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA Verardo R., Wagner L., Wahlstedt C., Wang Y., Watanabe Y., Wells C.,
RA Wilming L.G., Wyszewski-Boris A., Yanagisawa M., Yang I., Yang L.,
RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Hirozane-Kishikawa T., Kono H., Nakamura M., Sakazume N., Sato K.,
RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Birney E., Hayashizaki Y.;
RT "Analysis of the mouse transcriptome based on functional annotation of

```
RT 60,770 full-length cDNAs."
RL Nature 420:563-573 (2002).
CC -!- SUBCELLULAR LOCATION: Secreted (Potential).
CC -!- TISSUE SPECIFICITY: Highly expressed in embryonic tissue and in
CC tissues containing epithelial cells.
CC -!- MISCELLANEOUS: Binding analysis failed to detect interaction with
CC multiple IL1R family members.
CC -!- SIMILARITY: Belongs to the IL-1 family.
CC -----
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CC -----
CC EMBL; AF200493; AAF69249.1; -.
CC EMBL; AF206697; AAG35671.1; -.
CC EMBL; AK004061; BAB23147.1; -.
CC HSP; P01584; 1HIB.
CC MGD; MGI:1859324; Il1f6.
CC InterPro; IPR008996; Cytok_IL1 like.
CC InterPro; IPR000975; Interleukin_1.
CC Pfam; PF00340; IL1; 1.
CC PRINTS; PR00264; INTERLEUKIN1.
CC ProDom; PD002536; Interleukin_1; 1.
CC SMART; SM00125; IL1; 1.
CC PROSITE; PS00253; INTERLEUKIN_1; FALSE_NEG.
CC Cytokine; Multigene family.
CC KW Cytokine; Multigene family.
CC SQ SEQUENCE 160 AA; 18015 MW; AA0434D68FF62F4A CRC64;

: Query Match 14.7%; Score 171; DB 1; Length 160;
Best Local Similarity 31.6%; Pred. No. 2.7e-07;
Matches 43; Conservative 25; Mismatches 62; Indels 6; Gaps 4;

Qy 51 KVKNLNPKKFSIHDDHVKLVLDGSLIAVPDKNYIRPEIFFAL-ASSLSASAEGKSP 109
Db 6 ELRAASPSLRHVQDLSSRWLQNLITAVPRKEQTVVTITLPCQVLDLTETNRGDPT 65

Qy 110 LLGVSKGFCLYCDKDKQSHPSLQKKEKLMKLAQAQKESARRPFIFYRAQVGSNNMLES 169
Db 66 YMGVQRPMNSCLFCTKDGQ--PVLQLGEGNIMEMYNKKEPVKAS-LFYHKSGTSTPES 122

Qy 170 AAHPGWF--CTSCNC 183
Db 123 AAFPGWFIAVCSKSGC 138

RESULT 15
IL1FA_MOUSE STANDARD; PRT; 152 AA.
AC Q8R459;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Interleukin 1 family member 10 (IL-1F10).
GN Name=Il1f10;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Swiss Webster / NIH;
RX MEDLINE=21988051; PubMed=11991723; DOI=10.1006/geno.2002.6752;
RA Taylor S.L., Renshaw B.R., Garka K.E., Smith D.E., Sims J.E.;
RT "Genomic organization of the interleukin-1 locus."
RL Genomics 79:726-733(2002).
CC -!- FUNCTION: Binds soluble IL-1 receptor type 1 (By similarity).
CC -!- SUBCELLULAR LOCATION: Secreted (By similarity).
CC -!- SIMILARITY: Belongs to the IL-1 family.
CC -----
```

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CC -----
CC EMBL; AY071844; AAL67155.1; -.
CC HSP; P18510; 1IRA.
CC MGD; MGI:2652548; Il1f10.
CC InterPro; IPR008996; Cytok_IL1 like.
CC InterPro; IPR000975; Interleukin_1.
CC Pfam; PF00340; IL1; 1.
CC PRINTS; PR00264; INTERLEUKIN1.
CC ProDom; PD002536; Interleukin_1; 1.
CC SMART; SM00125; IL1; 1.
CC PROSITE; PS00253; INTERLEUKIN_1; FALSE_NEG.
CC Cytokine; Multigene family.
CC KW Cytokine; Multigene family.
CC SQ SEQUENCE 152 AA; 17077 MW; 9AD03EB0C3C61D8A CRC64;

: Query Match 14.2%; Score 165.5; DB 1; Length 152;
Best Local Similarity 33.6%; Pred. No. 8e-07;
Matches 49; Conservative 18; Mismatches 72; Indels 7; Gaps 4;

Qy 60 FSIHQDQHKVLVLDGSLIAVPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGEF 118
Db 10 YIIKDAHQKALYTRNGQLLDGPDSDNYSPKVCILPNRGDRSK---VPILGMQGGSC 66

Qy 119 CLYCDKDKGSHPSLQKKEKLMKLAQAQKESARRPFIFYRAQVGSNNMLESAAHPGWFIC 178
Db 67 CLACVKTR--EGPLQLQLEDVNIEDLYKGGEGQTR-FTPFQRLSGSAFRLEAAACPGWFLC 123

Qy 179 TSCNCPNPVGVTDKFNKRIEFSQ 204
Db 124 GPAEPQOPVQLTKSESPSTHTFEYFE 149

Search completed: September 29, 2005, 11:16:36
Job time : 107 secs
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